Address

DELIVERED AT THE

PATHOLOGICAL SOCIETY OF LONDON

On Tuesday, January 18th,

BY SIR JAMES PAGET, BART., F.R.S.,

PRESIDENT OF THE SOCIETY.

GENTLEMEN,—I thank you heartily for the honour you have conferred on me by electing me to be your president. It is a great compliment that I should still be thought fit to be president of a Society of which the most active members are much younger scientific men, some of whom are studying pathology in subjects and with methods almost unknown to me. If I can be at all fit for the office, it may be because, in my very imperfect knowledge of many of the numerous methods in which pathology is now studied, I can look with full respect upon them all; and, indeed, there are few things in relation to our science of which I am more sure than of this, that every possible method of studying it should be by all possible means promoted. And while I am your president this shall be my object, so far as I may have power.

I hope I shall not prove myself unwise if I do not take for the subject of my address that kind of knowledge in which alone I might claim superiority over my hearers—namely, the personal memories of the far distant past. It would be very pleasant to me to tell some of them, and might be amusing and flattering to those who can compare the best modern knowledge with that which it has displaced. But it may be more useful to think and speak of what may next be done, and how to do it. For every increase of knowledge brings before us a larger and clearer view of the immeasurable quantity which is still to be gained. The more we know, the more can we see, if we will, how much more there is that we do not know.

I wish I could indicate all or many of the ways in which new knowledge is to be gained; but I cannot. It is characteristic of modern pathology that, as it certainly surpasses all other sciences in the variety and complexity of its problems, so it offers work sufficient for the employment of nearly every variety and opportunity of the scientific mind. Pathology, as distinguished from practical medicine, used to be regarded as scarcely more than morbid anatomy; but now there is in it work not only for the anatomist and physiologist, but for the clinical observer, the experimentalist, the minutest microscopist, the statistician, the chemist, the naturalist, the historian, the psychologist, and yet more. I cannot pretend to be all these; and I will not pretend to decide who has done the best work or is most likely to do it in the future. Only, it is certain that complete pathology must be constructed from the works of all these; they are all mutually dependent, mutually corrective; none can alone suffice, and none can safely be neglected.

But, of all the methods of study, there are only two with which I have been much occupied—those, namely, of pathological anatomy and of clinical pathology in active practice. I can therefore speak of the future employment of only these two. But I will hope they may suffice, especially as the greater part of the members of the Society are engaged in them, and because we may justly believe that practice and pathological anatomy, if they be studied with the scientific mind and methods, will still contribute largely to the progress of the whole science of pathology.

I say practice studied with the scientific mind, because practice is often spoken of as if it were altogether distinct from science and inconsistent with it. We hear science and practice spoken of as in opposition, and sometimes as if they were mutually distrustful. I will not deny that strange contrasts of the practical and the scientific may be found among us; but these contrasts are constantly becoming more rare, and it is an excellent influence of this Society that it tends to cultivate the scientific mind and to maintain it in the practical life. For what practice may be depends, in all respects, much more on the person engaged in it than on its own subject-matter. It may be for one a noble profession, for another a vile trade; and in equal contrast it may be a mere useful art practised by one who has neither love nor knowledge of any science, or to the man of scientific mind it may be a thoroughly scientific study as well as an applied science. I could name many living in active practice of whose work a great part is as definitely scientific as is that done in any other section of biology. And so are the works of many who are gone. For example, I know no reasonable definition of science which would exclude the researches by which Bright attained the knowledge of the disease which bears his name; or which, in a just history of pathology, would separate, as if they were of different merits, the clinical and the experimental researches from which we have our knowledge of the diseases of arteries and veins. Surely, it would be hard to name a discovery in biology which more deserves the name of scientific than does Jenner's discovery of vaccination; and yet it was made in the plainest practical manner while he was a country practitioner. But, observe, Jenner was a thorough naturalist, trained by John Hunter; and I suspect it will be found that all the best advances in clinical pathology, the best not only in their utility but in their fitness for adjustment among the largest principles of our science, have been made by practitioners who were either by nature or by cultivation men of scientific mind. And it is as sure as anything of the kind can be that similar studies by men of similar mind will still attain as good results.

Practice is full of opportunities for science. Let me suggest only one group of them. Reflection on any day's work in practice may convince us that we have been using a good deal of knowledge or belief which we cannot explain by its relation with other knowledge, whether in pathology or any other branch of science. We may have given what are called specific medicines, or have advised some one in the belief that he was predisposed to some disease, or may have talked of functional diseases. Yet I doubt whether in any of these things there are more than unexplained facts; and if there are not, then we may be sure that the facts are very hopeful beginnings for scientific study by those engaged in practice. I may illustrate this by the example of the use of some of the specific medicines, such as that of quinine in malarial diseases, of mercury and of iodide of potassium in syphilis, of arsenic in many cases of psoriasis, or of bromide of potassium in some cases of epilepsy. Here are sure facts, practical and useful, as sure as anything in therapeutics. I would not call them scientific, for, so far as I know, they are isolated facts, and separate from what may be called general laws in biology. They are, indeed, the chief of those facts which, in some minds, bring our clinical pathology into discredit; for, being only useful and not scientific, they are cited as examples of unscientific practice. They are called empirical, and the empiric is deemed equivalent with the quack. Let me say, as in parenthesis, that I think we have here an example of the common fate of words in our language—that if a word acquires a discreditable meaning, its better meaning is gradually lost, and only the worse remains with it. For the empiric and the experimentalist are, I think, synonymous; and yet in pathology the one, having a degraded name, is now deemed a hopeless hindrance to progress, and the other is its hero.

But, however this may be, among these empirical facts modern scientific work in practice may win great riches for pathology. For the medicines I have named are not only remedies, but diagnostic tests; they prove differences among diseased conditions that in other things appear alike. The epilepsy which is averted by the habitual use of bromide of potassium cannot depend on the very same conditions as that which is not so averted; the ulcer which heals under the influence of mercury cannot be of the same kind as that which looks like it but does not so heal. Thus, as we all know, these medicines are tests; and we may guess that each of them detects the presence of some material belonging only to the disease which it cures. Here, then, is work for the scientific practitioner; he may find the material and more, if he will observe the facts in practice much more minutely, and record and collect them, and bring to bear on them as much light as possible from other sections of pathological science. They will yield more knowledge, and his practice will be promoted to a better title than "empirical."

Let me again refer to some facts which I have already mentioned, and which are now accepted in the largest principles of pathology. I remember that during my apprenticeship, more than fifty years ago, in a post-mortem exami-

nation of one who had died with dropsy, a young Guy's man cut across one of the kidneys, and said "Dr. Bright, of Guy's, says there is a form of dropsy which is always associated with disease of the kidneys." This was accepted by the practitioners standing by as a singular fact, and nothing more. I should find it difficult to tell now into what, with fifty years of scientific culture, that singular fact has grown. Or, again, could any fact stand more alone than did that of the use of vaccination as first observed by Jenner? And now it may be honoured as the first knowledge attained in all that wide range of pathology in which Pasteur's great work has been done, and to which Power and Klein have lately annexed their admirable discovery of the true source of the milk scarlatina.

There are many more of this group of the facts of which we have better knowledge in practice than we have in morbid anatomy or any other section of pathology. We are sure, for instance, that there are certain conditions which are justly called predispositions to disease; but in what many of these consist we are, I suppose, quite ignorant. There are diseases or disorders which we must be content to call functional, though I suppose none of us would hold that there can be any change in the working of a part without a change in its structure or composition. We know that certain disorders, such as typhoid and scarlet fever, are apt to be followed by certain other disorders, which we call their sequels; but we have not yet shown the changes of which the sequence is a necessary consequence. We know that different morbid conditions may be combined, as in diseases which we may call hybrid or mongrel; we can recognise many of these combinations during life; they are things to be "attended to," as we say, in treating cases; but of the allied varieties of morbid changes of structure or composition, and of the lessons they would teach, we know, I think, at present very little.

How may these defects be remedied? Surely, the best way will be by study and minute scientific work in practice. I say emphatically minute work, for I think it can be proved by the example of other sciences that the more minute the inquiries and the facts obtained by them, the more sure and complete will the fusion of pathology become with the whole body of biological science, and the more will it thence gain.

Now, these more minute investigations may be made not only in the records of clinical observation, which may be far more minute than they are now, but, I venture to think, even in microscopic examinations, especially if these be made whenever it is possible on the living as well as on the dead morbid structures. I would not, in any degree, depreciate the value of the knowledge gained by examining the well-defined structures which are shown in microscopic specimens prepared with hardening and staining and other fixing processes. They ensure a more exact diagnosis, and they may be studied deliberately and with comparison; but while they have all the value, they have also some of the defects, of botanical specimens dried and flattened in an herbarium. These are essential to accuracy in descriptive botany, and to the diagnosis of species and varieties, but the vegetable physiologist must study living things. The herbarium tells little of the true plant-life, and of many processes in which that life is expressed, such as the minute intra-cellular movements and others of the like kind. Things of this kind, and important differences among them, may be found if the method of examining still living tissues can be improved, and if it be the rule to examine each morbid growth or product both directly after its removal from the living body while it may be deemed still alive, and after it has been prepared for repeated examining by staining or other like processes. I venture to expect that by methods such as these, and with improving microscopic power, the sight may often reach far beyond the boundary of what has yet been seen, and will detect differences of structure or of movement in what we are at present obliged to call structureless. And, even beyond this, I would hope that the microscope, with microscopic chemical tests, will detect differences which must be referred to differences of composition rather than of anything that can be called structure, and yet not less decisive of distinctive properties.

But I will not go on thus hoping, and perhaps only guessing. Let me only add one warning suggested by that word "structureless." It suggests the recollection that we are all apt at times to submit to the fascination of promises of finality; to find comfort in believing that we have really reached a boundary; that something is really structureless; or that there is a protoplasm which is the same always and everywhere, at least in the same species; or that in apparently similar substances there may be differences of potentiality; as if in things material there could be differences of power or property without differences of structure or of composition. We should get rid of these idle-making fallacies. The protoplasm in every structure, or of every embryo, must be as essentially different from that of every other as is the structure or the creature which in due time it may become; and these differences will be discovered by our successors if we—I mean you—do not discover them. And for one caution more. Let us never be content with present utility. Glad of it we may well be, and even proud, for science cannot be degraded by being useful in good things, and I suppose that of all utilities none can minister more happiness to those who most need it than ours may; but we must not be content with it as it is; it will be increased by every increase of our real knowledge.

Let me, before I end, again express my regret that I have been obliged to limit myself thus narrowly in speaking of pathology. Let me repeat that it is only because I have too little knowledge of other methods of study to speak of them definitely or even safely. But I earnestly hope that in our meetings we shall have contributions from them all, for all are essential to the progress of our science, and it will be a singular pleasure to me if, in my office as president, I can promote them. To do so will make my office very happy and very useful to me in helping me to avert that sad defect of old age, the indifference or dislike to the changes which come of the increase of knowledge. One sees that, as men grow old and wish for rest, they are prone to ask, Where are we to stop? I do not know more than this: that we must not stop where we are; we must go on and on, and we may be sure that they who work to find the truth will not work in vain—sure that with true work true good will come. So I will hope that it may be here during my presidency.

Harveian Lectures
ON
CANCER OF THE UTERUS.

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LECTURE II.
CANCER OF THE CERVIX.

GENTLEMEN,—We now pass on to the consideration of cancer of the cervix proper, but before entering upon this part of our subject we must take a rapid glance at a condition which has received a great deal of attention from time to time, and for which many kinds of treatment have been practised, but whose nature remained quite unknown until revealed recently by the investigations of Ruge and Veit. I mean so-called ulceration, abrasion, or erosion of the os uteri. This is situated on the lips of the uterus, on one or on both. It is of a red colour, and in some cases forms a narrow ring around the os; in others it is limited to one lip; in others, again, it covers an area as large as a florin, and involves apparently the entire surface of the lips. The surface is soft and often covered by papillæ, which bleed readily. The condition is neither an ulcer, an abrasion, nor an erosion. There is no loss of tissue, and the surface is covered by epithelium, but it is epithelium of the columnar kind. The columnar epithelium has encroached upon the territory of the squamous and displaced it.

An erosion may present an appearance very like that of cancer, and, on the other hand, cancer may appear very like an erosion. In such cases it is not possible to recognise the real character of the morbid process at once except by the microscope. Clinical observation fails here unless ample time be given, and sometimes this is done and the consequences are disastrous in those cases which prove to be malignant, for when time has solved the difficulty it is too late to have recourse to any curative treatment with any chance of success.

What is an erosion? and in what does it differ from cancer

and adenoma? I cannot describe it better than by saying that it is like an extension of the mucous membrane of the cervical canal through the external orifice on to the lips, which are in health covered by stratified epithelium. In some cases an appearance like that of an erosion is caused by a hypertrophy of the mucous membrane of the cervical canal, bulging downwards through a more or less patulous os with soft lips, as is sometimes seen in pregnancy. In cases of this kind the transitional epithelium is retained, and it can be easily seen in the space between the squamous and columnar epitheliums. A true erosion, however, consists of a structure like that of the mucous membrane of the cervix placed on a surface which in health is covered by squamous epithelium. It may be, and often is, associated with a hypertrophy of the mucous membrane of the lower part of the canal. It contains glands lined by columnar epithelium, and its surface is covered by epithelium of the same character. An erosion differs from cancer in that the epithelium on its surface and lining its glands consists of a single layer and assumes no aberrant forms, and from adenoma of the cervix in that the glands are comparatively superficial, as well as in some other respects which I shall refer to later.

Ruge and Veit state that the glands of an erosion arise from a change in the deeper layer of the stratified epithelium which dips into the substance beneath and forms glandular processes. I have not been able to trace this mode of gland formation in erosions, and the process appears to be somewhat improbable. There are two ways in which erosions may arise, and one in which they are certainly produced. On examining a cervix upon which an erosion is seated, you will see little red points on the surface of the squamous epithelium near the edge of the erosion, and sometimes small islets of pale squamous epithelium in the midst of a red erosion. These points and these islets clearly indicate the manner in which the erosion has been formed. The little red points are small glandular processes from the cervical glands growing into the superficial layers of the cervix, and making their way to the surface. In speaking of cancer of the vaginal portion, I said that the squamous epithelium falls off at the points where papillæ grow through the surface and protrude. They do not carry a layer of the horny epithelium with them as a covering. The same thing happens when a glandular process in the cervix abuts against the epithelium; the epithelium becomes thinner and thinner, and ultimately disappears.

In cases of erosion the glands of the lower part of the cervix are greatly enlarged and multiplied. They enter deeper into the cervical wall, and their interior is frequently covered by papillary processes. Although these glandular processes penetrate into the wall of the cervix, their line of penetration appears to be superficial, for they run downwards and outwards, and invade the layer of tissue immediately beneath the squamous epithelium covering the portio. They burrow, as it were, in the tissue beneath the epithelium, and send processes through it to the surface. This manner of growing gives to the border of the erosion an irregular outline, and, moreover, occasions the presence of the red points on the squamous surface, where the epithelium is thinned or wanting, as well as of the islets of squamous epithelium in the midst of erosions where the original squamous epithelium has missed transfixion by the glandular growth. When the squamous epithelium has fallen off, its place is taken by columnar epithelium. The glands are lined by columnar epithelium, which is usually like the epithelium of the cervical follicles; its cells are often oblong, but frequently they are elongated and apparently pointed, with their points a little separated, and the prominence of a papilla on the inner surface of a gland then looks like the end of a brush with radiating hairs.

Another way in which an erosion may be produced is by direct extension downwards of the epithelium of the cervical canal—a direct encroachment upon the territory of the squamous by the columnar epithelium, followed by the growth of villi and the formation of glands. This mode of production, however, I have not observed, but I think it by no means an improbable method.

The wealth of glands in an erosion is usually great; they branch and divide and form clusters of follicles having one tubular outlet. Some appear to remain simple. Their interior is often, however, divided by papillary processes in such a manner that their lumen forms a very complex labyrinth. While the glands are thus rapidly growing the stroma around is not inactive, and takes not an inconsiderable part in the formation of the erosion, for it is infiltrated with nuclei and small cells, and from it are formed the basis of the numerous papillæ which contribute to the complexity of the glandular structures. But besides the common glandular erosion there is occasionally found around the os externum and in the lower part of the cervical canal a villous growth. It is believed that such growths have a great tendency to take on a malignant character, though they are benign at the outset. Scientific evidence establishing this view I am not acquainted with. I have seen three cases of villous growths at the os externum, and one in which the whole of the cervical canal was affected. The two in which the parts around the os only were affected presented no malignant structures; the other in which the whole canal was diseased showed early cancer in the glands. These cases supply no evidence for or against the view in question, and I have therefore formed no opinion about it.

CASE 9.—The first case was a married woman twenty-eight years of age, who complained of having had bearing-down pains for eighteen months; they came on every fortnight; for two weeks before admission she had had continuous aching pain in the bottom of the stomach. The catamenia were regular, and the patient had no other discharge. She was married at nineteen, had had three children, with good gettings up, and had nursed all her children. She had had a tumour as large as a nut removed from the forehead and another from a toe when a child. The area of the lips of the cervix was as large as a florin. The enlargement was limited to the lips. It was of a red colour and granular to the touch. This looked like hypertrophy of the mucous membrane of the lower part of the cervical canal. Posteriorly the growth was sharply defined, but anteriorly it gradually shaded off into the healthy surface covered with squamous epithelium. The uterus was of normal size and freely movable. The cervix was amputated: an inch was removed. The part removed was laid open by section of the anterior lip in the middle line. The disease was limited to the surface around the os and about a third of an inch up the canal. It was of a villous character, and grew from the whole circumference of the canal except the left side, which had been lacerated. Near the edge of the growth there were islets of mucous membrane covered by squamous epithelium; through some of these the growing papillæ were seen beneath.

CASE 10.—This patient was sent up to University College Hospital by Mr. Pratt, of Leighton Buzzard. She was twenty-three years of age, and not married. Her illness began three years before, when severe pain began to accompany menstruation, seated chiefly in the hypogastrium, but extending into the iliac regions also. It was of a sharp, shooting, burning character, lasting for five or six hours, after which shooting pains continued for two or three days after the period had ceased. Menstruation first began in her sixteenth year; it was irregular for twelve months, moderate in quantity, and painless. She was in service until three years ago, but owing to her present illness she had to give up work. There was a great deal of viscid mucus in the vagina. The lips of the cervix looked like a red vascular growth, not unlike a malignant growth. The os was a long transverse slit in its centre. It bled on being touched. The cervix was amputated half an inch above the disease. After removal the disease was seen to be formed by an exuberant growth of mucous folds, which grew from all the circumference of the os, and extended up the canal for a third of an inch. Its limit towards the vaginal portion was abrupt, and the folds in this situation were smaller than at the os externum.

In both these cases microscopic examination revealed nothing but rapidly growing papillæ and glands. There was no cancerous change in any part.

Glandular growths limited to superficial tissues lead us naturally to glandular growths which are not thus limited, and which involve deep structures, affect the whole thickness of the cervix, and invade the connective tissue beyond. These are adenomata, and possess malignant properties. They appear to be rare; for with the exception of Schroeder, Ruge, and Veit, who have described a case, I know of no other author who has referred to them. I have seen two cases of this affection, and both were taken for cancer Indeed, I know of no means by which they can be diagnosed clinically, though the diagnosis can readily be made with the help of the microscope.

CASE 11.—The first case I saw was a married woman, forty-nine years of age, who had had eight children and five miscarriages. Menstruation had ceased two years before she came to the hospital, and she had "seen nothing" since until May, 1885—four months before admission. Since May she had lost a great deal of blood and suffered much pain. She had had a white discharge from the beginning of the year, and lately this had become offensive. When admitted she complained of pain in the bottom of the stomach, back, and thighs, of a dull aching character; it was sometimes severe. The duration of the attack varied; the pain always ceased on lying down. She had lost flesh lately. Micturition was very frequent and painful. She began to menstruate in her sixteenth year; she was regular every twenty-eight days; the flow lasted a week, and was moderate in quantity. She had suffered from leucorrhœa all her life. She was married at twenty-two. All her labours were good. There was no history of tumour or cancer in the family.

There was much purulent discharge in the vagina, and the mucous membrane was red and injected. The upper part of the vagina was occupied by a large mass, which was the diseased cervix of the uterus. The disease involved most of the posterior lip and a part of the anterior, and had invaded the insertion of the vagina both anteriorly and posteriorly. The vaginal surface of the cervix was intact—that is, the stratified epithelium was still retained, but it was generally thinner than it is in the absence of disease. The degree of thinning varied; in some places it had almost disappeared, while in others it was nearly of normal thickness. Immediately subjacent to it was a layer of tissue of irregular thickness, which appeared to be the tissue of the cervix infiltrated with small cells. This layer was everywhere thin, though not everywhere of uniform thinness. The rest of the tissue was formed of innumerable glands, with a scanty framework between them of fibrous tissue full of round cells. In fact, the cervix had been changed into a glandular mass. These glands were of every shape and form. Their cavities were often of great size; some were like great collapsed sacs lined with columnar epithelium. They differed in a marked degree from the glands in an erosion by the absence of papillæ on their inner surface. They were lined by a single layer of columnar epithelium, the cells of which were regularly oblong. The cells generally presented no cancerous change. This appears structurally to be a pure adenoma, but it possessed distinct malignant properties. The whole thickness of the cervix and the connective tissue beyond it had been invaded.

CASE 12.—The second patient was forty-four years of age, married, and was admitted into University College Hospital in August, 1886. She had been regular until eighteen months before, when she had a flooding; since that time she has had a profuse flooding every ten or fourteen days. She has suffered from a thick, yellow discharge for the same period, but it has not been offensive. She has had no pain. Micturition has been normal, as well as defecation, but the bowels have been confined. She has lost a stone in weight during the last two years, and has frequent nausea. Menstruation commenced at thirteen; it was regular every month, lasting two or three days; the flow was not much, and was painless. She had continuous leucorrhœa. She was married at twenty-three, has had three children, the last twenty years ago; she has had one miscarriage since. Her labours were good, but she regained her strength slowly. She nursed her children for about eight months. Two brothers and one sister died of consumption, but there was no history of cancer in her family. Pulse 99; temperature 99·2°.

She was fairly nourished. There was a thin watery discharge from the vagina. The cervix was represented by a mass which felt rough, like the head of a cauliflower. It was half as big as a man's fist, and grew from the whole of the cervix. It nowhere invaded the vagina, but on the sides posteriorly it extended as far as the vaginal insertion. The body of the uterus was anteflexed and slightly enlarged. There was no induration to be felt around the uterus on examination by the vagina and by the rectum. The obturator glands could not be felt, and the glands in the groins were not enlarged. The mass was scraped away, and it was found that the whole of the cervix up to the inner orifice was diseased. The microscopic appearances presented by the growth were similar to those in the previous case; but the stratified epithelium was everywhere thinner, though in part retained.

We now proceed to the study of true cancer of the cervix, distinguishing it from malignant adenoma by characters which I shall describe. It may begin in almost any part of the cervix, and we will begin with an account of it as it is met with in the lower part of this structure.

CASE 13.—For notes of the first case I am indebted to Dr. George Bird, with whom I saw the patient. Previously to her marriage, at twenty-two, she had enjoyed good health. The cervix was divided bilaterally in 1876. She went to India. In 1877 menstruation recurred every three weeks. In 1885 menstruation was excessive, lasting seven days. The cervix was ulcerated, with stringy discharge issuing from the os. She had no bearing down, but much aching pain in the vagina. The os bled on being touched. She first noticed excessive menstruation in 1883. She had a discharge which was slightly tinged with blood escaping during micturition. A sojourn at Malvern improved her condition, and in February, 1886, it was noted that the periods lasted five days, the intermenstrual interval being twenty-one days. She was losing flesh. When I saw her there was an erosion on the cervix, and the canal was filled with a soft dark-red growth, which bled freely on examination with the finger.

The cervix was amputated at the inner orifice. On cutting open the part removed, it was seen to be covered with villi almost three-fourths of an inch long and of a dark-red colour. They were in the main simple, and not branched—in fact, not unlike the simple tentacles of an actinia. The squamous epithelium of the portio was intact, but there was an erosion at the os with numerous large glands. Just within the external orifice were some superficial glands undergoing cancerous degeneration. The upper and more superficial part of the gland was lined by healthy columnar epithelium. In the deeper part it was many-layered, and filled the lumen so that the fundus of the gland appeared like the end of a club. This little mass was nodular, and short processes of fibrous tissue projected into its interior like imperfect septa, the alveoli formed by them being filled by cancer cells. It seemed as if a gland, in the fundus of which were many papillæ, had become cancerous. The transition from the columnar epithelium into cancer was well seen. The cells became many-layered and, losing their columnar form, became many-shaped. In many places there were vacuoles containing several small cells or nuclei, generally closely aggregated together; in others more loosely. The cancer in this instance began in the superficial glands or in the deep recesses between the villi, and not on the villi themselves. The cervix was removed because the villous growth was suspected to be malignant. The villi were not cancerous, however, although cancer was present at their bases, and it was present at such an early stage that it would have been impossible to discover it except by the aid of the microscope, for it gave rise to no physical signs which would lead to a suspicion of its presence. It is, I think, certain that in this case the growth of villi preceded the growth of the cancer; but this does not prove the tendency of villous growths of the cervix to become carcinomatous, for the cancer attacked structures which are present in every healthy cervix—namely, the glands, not the villi.

CASE 14.—In the next case cancer had attacked the lower two-thirds of the cervical wall and formed a kind of nodule in it. The patient was admitted into University College Hospital on Jan. 23rd, 1884. She was forty-two years of age and married. She had always been a strong healthy woman previously to her present illness. About Christmas, 1882, she noticed that she was growing stouter and fancied that she was pregnant; at the same time there was milk in her breasts. At the beginning of her illness she had a discharge of blood from the vagina during micturition; this discharge would last for a week or a fortnight, and then cease for a time; it only appeared during micturition. For a long time—she does not remember how long—she has been subject to bleeding after coitus, but in August, 1883, connexion was followed by a large flooding; since that time the hæmorrhage has been almost continuous and liable to be greatly aggravated by exertion of any kind. Previously to August the discharge was almost pure blood, but during the last four or five months a yellow discharge appears whenever the bleeding ceases. The discharge has been offensive throughout. She has had a dull aching across the loins, but no pain in the stomach. There has been no difficulty in micturition or defecation. She has lost flesh lately. Menstruation began at fifteen, and has always been regular, and never painful. It returned at intervals varying between three and four weeks, and lasted three days each time until four years ago; but from that time on, the flow lasted for not more than a day. The loss was not excessive.

The patient was married at thirty-four, and has had one child; her labour was easy and natural; she has had no miscarriages. Her father died of cancer of the stomach, and her mother (at fifty) of "effusion on the brain"; brothers and sisters healthy.

The whole uterus was extirpated. The following description is by Mr. Victor Horsley, M.S.:—The parts removed consist of the uterus and parts of the vaginal wall. The body of the uterus was healthy. The cervical wall is occupied for its lower two thirds by a whitish mass of new growth which apparently ceases above by a well-defined margin. The rest of the cervical wall is pale almost as far as the internal os. The new growth has infiltrated the lips of the external os, so as to form a large bulbous swelling around that orifice, especially anteriorly, where the growth is about one-fourth of an inch in thickness. At the upper part, where this growth appears to finish, the muscular wall is pressed upon so as to form a sort of capsule. The under surface of the lips is exteriorly ulcerated, and this condition extends upwards along the right side of the cervix as far as the middle. On the front wall are still present remains of the arbor vitæ. The surface of the vagina posteriorly is encroached upon for a distance of half an inch. The margins of the ulcer are thin, but raised.

This was a typical case of cancer growing from the cervical glands. The patient died, and the lymphatic glands along the iliac vessels and one gland at the bifurcation of the aorta were considerably enlarged and infiltrated by creamy white new growths.

(To be concluded.)

ABSTRACT OF THE

Lettsomian Lectures

ON SOME OF THE

MENTAL AFFECTIONS OF CHILDHOOD AND YOUTH.

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LECTURE II.

Causes of Idiocy: Causation of Accidental Cases.—The history of the "accidental" cases usually elucidates the cause. Necessary instrumental interference at birth was the cause of a few cases only. During the later years of Dr. Ramsbotham's life the lecturer took great pains to investigate the subject, and he found among the great number of feeble-minded children about whom he could get thoroughly reliable accounts that in only 3 per cent., including members of the three great classes, had the forceps or any other instruments been employed. It is probable that in 9 per cent. of purely "accidental" cases instrumental interference might have been the principal factor. Prolonged labour was far more important in the production of accidental cases. In the paper read before the Obstetrical Society of London, Dr. Down found that in as large a proportion as 20 per cent. of all idiots there was an undoubted history of suspended animation at birth requiring active efforts to bring about resuscitation. He believed that many surgeons could testify to the frequency of association of contractures and other lesions with suspended animation at birth. First labours being longer than later ones, first-born children more often owe their idiocy to prolonged parturition. It was "not proven" that ergot of rye given during labour was a cause of accidental idiocy. Insolation in infancy is certainly a cause. Opium was regarded as an infrequent cause. "Much more tangible as a cause is morbid sexual erethism, too often induced by nurses, who procure the quietness of their charge by means which, even if mental health is not sacrificed, lead eventually to grave moral delinquencies." Traumatic injury to the cranium from falls is a cause, though not a frequent one, of accidental idiocy. Meningitis very frequently leads to it. So also do epileptiform convulsions, whether eclampsic or not. Hydrocephalus and paralysis from cerebral hæmorrhage are occasional causes.

Causation of Developmental Variety.—Deterioration of mother's health, especially during the sixth or seventh month of pregnancy, is a potent cause. Causes of congenital idiocy operating during the later part of pregnancy produce the "developmental" variety. Vomiting, uterine hæmorrhage, great emotional disturbance, and grave febrile disease, were the most important causes of deterioration of the maternal health.

Causation of Congenital Variety.—In a large number of cases Dr. Down is convinced that several factors have been in operation. Heredity was an important factor. In the investigation of 2000 cases, 36 per cent. of the fathers and 38 per cent. of the mothers showed no history of neurotic disease. But only in 16 per cent. did Dr. Down fail to obtain a grave history of physical or psychical decadence from either progenitor. It might be necessary to examine the physical conformation of parents and grandparents. Disparity in the age of the parents might be a cause in some cases. Dr. Down has found that seven is the average number of living children born to those who have had an idiot child; prolific child-bearing appears to be a characteristic of people begetting feeble-minded children. Twin-births do not act as appreciable factors in the causation of idiocy. Dr. Down attaches immense importance to the emotional life of the mother during the period of gestation. The *physical health* of the mother also has an appreciable influence. One cannot fail to be struck with the nature of the stock from which idiots have sprung. "With fathers phthisical and irascible, with mothers feeble in judgment and so emotional that everything is a cause of fright, one is astonished that they should have procreated any sane child at all." Dr. Down has found it very difficult to get at reliable statements with regard to the influence of *alcoholic intemperance*. In the members of the upper ranks of the social scale it was an insignificant factor, but in the lower social classes a factor of great importance. Some cases are the result of deterioration of the father's mental and physical powers, others of procreation having taken place during a debauch. As to *malignant disease*, 3 per cent. of the fathers and 5 per cent. of the mothers, in all 8 per cent. of the progenitors, died from cancer. Goitre occurred in 2 per cent. of the mothers, but not once in a father. Syphilis is not an important factor in the production of idiocy. Dr. Down met with a history of epilepsy in 3 per cent. of the fathers and in 6 per cent. of the mothers. *Phthisis*, amongst progenitors, also exercises an important influence. This was most evident in the Mongolian type. In 23 per cent. of the cases there was a history of idiocy, mental feebleness, insanity, or other grave neurosis, in one or several of the brothers and sisters. The lecturer had known several instances of the father begetting healthy children except when suffering from recurrent mania, idiocy resulting to the children conceived at that time. In like manner Dr. Down knew of examples of healthy children being produced except when the merchant's business speculations have been hazardous, when the clergyman's parish has been disturbed, or the dissenting minister's church meetings have been stormy.

Although Dr. Down's patients came from every variety of social rank, he could not draw any safe deductions as to the influence of various occupations of the parents on the causation of idiocy. He had collected 400 cases with fair social antecedents, and had found that 75 per cent. were the children of merchants, county gentlemen, officers in the army and navy, gentlemen of independent means and liberal education, and members of the titled aristocracy. No less a proportion than 25 per cent. were the children of members of one or other of the three *learned professions*. Of these, 18 per cent. were the children of members of the clerical profession. Mr. Galton finds that the legal profession (which procreates fewest idiots) gives birth to 11 per cent. of the foremost men of eminence; that the medical profession (which procreates 1 per cent. more of idiots than the legal) gives origin to 9 per cent. of scientific men; while the clerical profession, which procreates the maximum amount of idiocy, gives birth to only 6 per cent. of men of science. These statistics illustrated the process of natural selection.

Dr. Down discussed at great length the subject of *consanguinity* in relation to idiocy. He is convinced that frequently the other possible factors have been neglected,

and this has led to very contradictory opinions. "Although, looked at superficially, my statistics are rather less favourable to the marriage of first cousins than are those of many other observers, I am strongly of opinion that, having regard to the remarkable antecedent neurotic history of the first cousins who have married and procreated feeble-minded children, the evil apparently resulting is, that where there is hereditary predisposition, the intermarriage of relations determines the concurrence of two morbid factors, and this may account for the undoubted greater frequency of feeble-minded children among the progeny of cousins than among those of mixed marriages."

Illegitimacy might be a potent factor in the causation if it entailed emotional disturbance in the mother during pregnancy. Attempted abortion might also have an influence. Idiocy is occasionally induced by deprivation of the senses. The case of a boy who was born only with the sense of smell and that of touch was narrated. The boy could "smell out" his friends, and manifested by a smile his consciousness of their proximity.

Cretinism might be caused by malarial poison. Some cases under Dr. Down's care were procreated during the intemperance of the father. Three of Dr. Down's cases of cretinism were male, and nine were females. He gave a *résumé* of the work of Billarger (1857), Dr. Hilton Fagge, Sir William Gull, Dr. Ord, Professor Kocher, and Victor Horsley on the relationship of cretinism to myxœdema and the thyroid gland.

Dr. Down entertains positive opinions as to the *higher culture of women*. He says: "If there is one thing more certain than another about the production of idiocy, it is the danger which arises from the culture of only one side of woman's nature. ..... There can be no reason why the faculties which they possess should not be cultivated so as to make them not only fit to be 'mothers of men,' but also companions and helpers. My statistics point to the importance of training our sons to be temperate, and our daughters to be self-possessed."

THE WHITE CORPUSCLE OF THE BLOOD.

A SUPPLEMENT TO MY REMONSTRANCE ADDRESSED TO PROFESSORS OF PHYSIOLOGY AND PATHOLOGY AGAINST TEACHING, IN THEIR WRITINGS, LECTURES, OR OCCASIONAL ORATIONS, THAT WHITE CORPUSCLES OF THE BLOOD EMIGRATE FROM THE INTERIOR OF SMALL VESSELS, UNTIL THEY HAVE VERIFIED IT BY ACTUAL OBSERVATION OF THEIR OWN AS A FACT IN NATURE.

BY T. WHARTON JONES, F.R.C.S., F.R.S.

THOUGH he still held that white corpuscles do emigrate through the walls of small vessels from the blood therein contained, Cohnheim latterly came to the conclusion that the escape depends on a passive filtration merely, and not, as he first supposed, on an active boring by means of processes which he alleged the white corpuscles shoot out even while the blood is still within the living vessels, in the amœboid manner they are seen to do in blood displayed under the microscope immediately that it is drawn.

Dr. Binz of Bonn,[1] however, maintains the validity of Cohnheim's first teaching, and, in support of it, adduces an experiment by which he thinks the white corpuscles of the blood within the vessels of the living part under observation can be rendered incapable of undergoing amœboid change of shape, and incapable therefore, according to him, of boring a passage through the vascular walls, so that emigration is prevented. This seems to be an inconclusive experiment, seeing that a reagent which could extinguish the irritability of white corpuscles is not likely to leave unscathed the other constituents of the blood and the integrity of the vascular walls. Suspension of the alleged capacity of white corpuscles to shoot out processes in an amœboid manner while the blood is still within the vessels might thus be owing to a change in the condition of their surroundings, as much as to change in that of the white corpuscles themselves. But, let it be asked, did Dr. Binz ever really see white corpuscles of blood, while still within the living vessels, shoot out processes in an amœboid manner under any circumstances, and by a teredinous action therewith make their way through the vascular walls?

Even if white corpuscles of the blood while still within the living vessels did undergo amœboid change of shape, what grounds are there for the supposition that the diverticular processes they shoot out do or could exert any boring action? The idea of a boring action, in fact, betrays an imperfect study of the nature of the amœboid phenomenon exhibited by the white corpuscles in blood newly drawn. The amœboid change of shape which the white corpuscles commence to undergo in blood immediately on being drawn seems to be really the result of partial contraction or collapse of the cell wall around the nucleus and contained protoplasm on one side, whilst on another side the wall is protruded here and there in diverticula. This takes place with a more or less evident jerk, and has been mistaken for an actual bursting of the corpuscle with evacuation of its contained protoplasm. There is, however, no such bursting of the corpuscle nor evacuation of the protoplasm.[2] Continuing to watch the corpuscle in its supposed burst state, we may see a diverticular process become more or less retracted in concurrence with a supervening diverticular protrusion of some other part of the cell wall which had been previously collapsed around the nucleus and protoplasm. Of the nucleus any defined view is prevented by the protoplasm.

The protrusion of a diverticular process is thus certainly not an active movement with force, like that of a proboscis fitted for a boring operation, as supposed. The phenomenon appears to be a last manifestation of the vital irritability inherent in the substance of the white corpuscles, excited by the altered condition in which the blood comes to be placed by abstraction from the living body. After the fibrin of the blood under examination is seen to have become deposited on the slide by coagulation from the plasma, the serum that is left seems to be received into the interior of the collapsed white corpuscles by endosmotic imbibition through their wall into the more consistent protoplasm, and distends them so far that they recover in some degree their round form.

In the course of our observations of the flow of blood in the vessels of a frog's web displayed under the microscope, a white corpuscle may often be seen to become adherent by a point of its surface to the wall of a vessel, and to be pressed into a pear shape, in consequence of the bearing of the passing stream on it while thus anchored. When the adhesion gives way, the white corpuscle, on becoming free, recovers its previous round form, and is carried along in the stream. This phenomenon, which is of well-known occurrence and obviously passive, has actually been described as a manifestation of an *active nibbling* on the part of the corpuscle by means of a process which it shoots out as a feeler for the purpose of finding a pore in the wall of the vessel through which to commence a boring operation in order to emigrate.

It is well known that when the white corpuscles of the blood are acted on by much diluted acetic acid, the protoplasm is dissolved out, and an object like several small nuclei adhering together brought into view. This object is commonly accepted as the *vera effigies* of what actually exists in nature before the abstraction of the protoplasm permits it to be seen. In my paper on the "Blood-corpuscle," in the Philosophical Transactions for 1846, it was, however, shown that the white corpuscle possesses in reality only one large nucleus, and that the appearance of several small ones aggregated together is owing to a corrugation of the cell wall of this single large nucleus by the action of the acetic acid of the dilution commonly employed. To prove that such is the fact, let water acidulated in the slightest degree only be used. Under the action of this, solution of the protoplasm will go on, though very slowly; but if we patiently watch its progress, a nucleus—single and large—will at last come into view.[3]

[1] Virchow's Archiv, vol. lxxiii.

[2] The protoplasm evacuated, as alleged, from the burst corpuscle was supposed to act as a ferment whereby coagulation of the blood was induced, but in disproof of this opinion there stands the fact that in the course of our observation fibrin is deposited by coagulation on the glass slide, though no such bursting of the corpuscles or evacuation of their contents is seen to take place.

[3] In histological research, reagents applied to the object under microscopical examination are often of great assistance by bringing into view details of structure and indicating chemical composition. As above shown, however, acetic acid corrugates the single large nucleus of the white corpuscle so as to make it appear as an aggregation of several small ones. From this example, a caution must be interposed against accepting the appearances disclosed by the action of reagents on tissues

In the course of my researches, I observed that the single nucleus of the white corpuscle of horse's and elephant's blood in particular was less susceptible of becoming corrugated under the action of acetic acid. Here I would particularly remark that the single nucleus of the white corpuscle of the blood of man and the mammifera corresponds in size and structure with the red corpuscle of the same blood; being, for example, very large in the elephant, in the blood of which the red corpuscles are very large; and, on the other hand, very small in the goat, in the blood of which the red corpuscles are very small; furthermore, inclining to an oval form in the alpaca, the red corpuscles in the blood of which are oval. It was for this reason, among others, that in my papers on the "Blood-corpuscle," in the Philosophical Transactions for 1846, I enunciated the view that the red corpuscles of the blood of the mammifera are homologous with the single nucleus of their white corpuscles.[4]

To return to the question of "emigratio." Although Cohnheim latterly abandoned the idea that emigration of white corpuscles from the blood is an active process, I do not know whether he continued to hold that white corpuscles, having passively escaped by filtration, do then commence to undergo amœboid movements, and thereby wander in the interstices of the tissues. If a minute section of the cornea be displayed under a microscope with a one-eighth of an inch object-glass, and attentively examined, no corneal corpuscles are at first seen at the cut edge. After a brief interval of time, however, corpuscles are observed to protrude as if filtering through interstices. Are these corneal corpuscles the objects which Cohnheim considered to be white corpuscles of the blood which had emigrated through the walls of vessels in the adjacent part of the conjunctiva and sclerotica, and which had, as he supposed, made their way by means of amœboid movements into the interstices of the cornea?

The gist of Cohnheim's doctrine, we have above seen, is that "emigratio" of white blood-corpuscles constitutes the first real characteristic step of the inflammatory process. The question, therefore, latterly agitated between Cohnheim and Binz as to whether emigration be a passive filtration or an active boring would be so far of secondary import in the pathology of inflammation, even if emigration pure and simple could be demonstrated. We have seen that "emigratio" has been accepted and taught as a fact by professors who seem never to have made any observation of their own relating to the subject. In the Hunterian oration at the Royal College of Surgeons some two years ago, the orator, in referring to John Hunter's sketch of the phenomena of inflammation, observed that if his hero had flourished in the present day he would have dwelt in a particular manner on the emigration of white blood-corpuscles, by virtue of their amœbiform endowments, through the softened walls of the small vessels and their further action on the tissues. Hunter, I am sure, would have done no such thing, but would have first said: "Let us see whether it be a fact that white corpuscles do emigrate at all, as alleged." Had the orator himself ever done this? Pity that some guardian angel had not roused him from the musings by which he was led to make such a suggestion, and whispered into his ear: *nil fingendum, nil excogitandum, sed inveniendum quod natura faciat—quod natura ferat.* That the walls of the vessels through which emigration is alleged to take place first become softened by inflammation, so that the white corpuscles are enabled readily to bore their way through, is an assertion in which the sequence of the steps formulated by Cohnheim is inverted, so that the gist of his doctrine of the inflammatory process is misrepresented; whilst his relinquishment of the idea of an active boring operation which he originally entertained is not mentioned.

"Softening by inflammation," which Mr. Marshall, in his Hunterian Oration under notice, alleged to be a state of the walls of the vessels which permits of a boring of the white corpuscles therethrough, is a mere gratuitous assumption, and, as we see, inconsistent with Cohnheim's teaching. The expression "softened by inflammation" might, however, be admitted as applicable to the softening and disintegration of structure to actual disappearance of the vascular walls, as originally observed and described by myself in cases of intense inflammation of the frog's web, whereby white corpuscles were left free and unenclosed in any wall, but forming, by their aggregation, succedaneous walls of a venous channel, through which the blood was seen still flowing. This observation was quoted in my "Remonstrance" from my essay in Guy's Hospital Reports for October, 1850. Had Mr. Marshall read this?

The characteristic which especially distinguished John Hunter as a scientific man was his subjecting the physiological and pathological questions that came before him to the test of observation and experiment. The suggestion, therefore, that he would have dwelt on "emigratio" in elucidation of the question of the pathology of inflammation on the mere assumption that it was a fact, made by Mr. Marshall in his oration, was like putting in a plea for Cohnheim's doctrine (though at the same time misrepresenting it) under the sanction of John Hunter's name. Such a suggestion, however, was disparaging rather than eulogistic of the hero of the day, and may be compared, conversely, to the divided eulogy of Harvey on the occasion of the unveiling of his statue at Folkestone in 1880, when Mr. (now Sir Richard) Owen, taking advantage of his position as inaugural orator, virtually claimed a place on Harvey's pedestal for the glorification of John Hunter also—a proceeding something like the cunning manœuvre of Richie Moniplies (subsequently dubbed "Sir Richard") in Sir Walter Scott's novel of the "Fortunes of Nigel," who enclosed in his master's petition to King James I., which he had been sent to deliver, a "sifflication" of his own.

The scepticism as to "emigratio" being a fact in nature evinced in my "Remonstrance" on the question has been called "comical"; perhaps the strictures now made may be accounted "pragmatical," though (to adopt Bishop Bedell's aspiration) I hope good men will not so account them. Hereto may be added, now I think of it, that my volume containing two lectures against the Darwinian hypothesis of evolution,[5] which had been delivered in the botanical theatre of University College to large audiences of ladies and gentlemen, was noticed in the *Saturday Review* at the time of publication in the following words, and no more: "The author is angry, and it is not very scientific to be angry." This short and easy criticism—this shirking the question under review and levelling a flippant personality against the author—was an *ignoratio elenchi*, aggravated in its meanness and dishonesty by being anonymous.

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as an exact representation of the details of structure actually existing in nature. Prepared structures mounted on slides—such as sections, vascular injections, &c.—are for the most part mere toys. It must always be borne in mind that the dissection of minute objects by manipulating under the simple microscope, whether for further examination with a higher power under the compound microscope or not, can never be superseded by the examination of ready-made specimens mounted on slides.

[4] It is to be remembered that the large nucleated red corpuscles of the early mammiferous embryo are homologous with the nucleated red corpuscles of the oviparous vertebrata. See my papers referred to for details in regard to this and my discovery of large nucleated corpuscles in the blood of grown mammifera, especially the horse and elephant, some with the cell wall slightly tinged red, and some with the cell wall wholly uncoloured, and as pale nearly as the almost invisible cell wall of certain oval nucleated corpuscles (the nuclei very strongly marked), observable in the blood of the frog, which I described and delineated forty years ago in the Philosophical Transactions, but which have of late years been "rediscovered"—to adopt a euphemism.

[5] Evolution of the Human Race from Apes, and of Apes from Lower Animals—a Doctrine unsanctioned by Science. London, 1876.

ON A CASE OF EMPYEMA,

WITH REMARKS ON THE MANNER IN WHICH PERFORATION OF A BRONCHUS IS BROUGHT ABOUT.

By C. J. BOND, F.R.C.S.,

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IN making a post-mortem examination some time ago in the case of a young man who had died suddenly with symptoms of empyema discharging through the lung, the condition found was sufficiently interesting to suggest the following remarks.

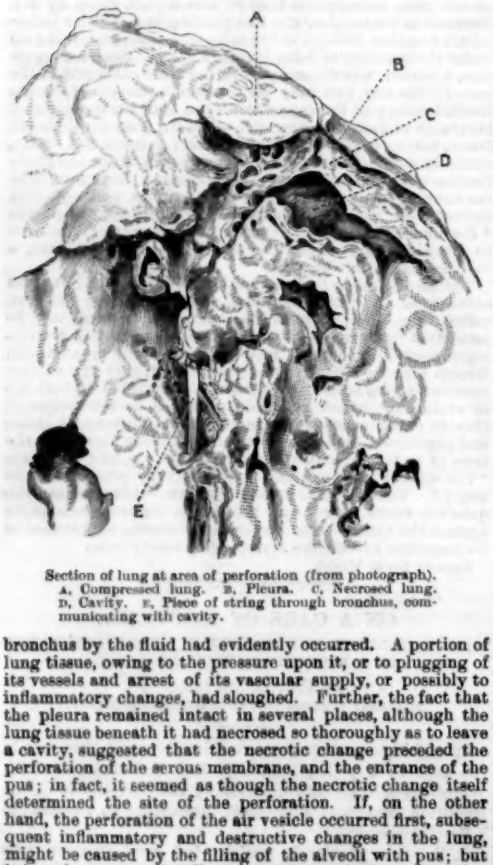
A. B——, a previously healthy lad, aged fourteen, was admitted into the hospital with a history of an attack of pleurisy, with effusion, of sudden onset, and of a month's duration. Some ounces of clear fluid were drawn off by aspiration. A week later, however, the patient was seized with dyspnœa, during which he coughed up a quantity of thin, purulent fluid. The pleural effusion had, in fact,

become purulent, and had perforated a bronchus. The patient died shortly afterwards.

Necropsy.—The right pleural cavity contained some ounces of thin offensive pus. The lung was collapsed—in fact, compressed from apex to base against the spine, the heart, and opposite mediastinum. Below the level of its root, just at the rounded and compressed posterior border, and close to the spine, was a depressed area the size of a penny, which contained numerous depressed openings. A section of the lung at right angles to the surface over a part of this area (Fig. 1) showed that several wedge-shaped portions of lung tissue had necrosed, partially and irregularly filling corresponding cavities (D) in the lung parenchyma. These necrosed portions of tissue (C) were still in continuity with the pleura (B) covering them, but in several places that membrane had also given way, thus leaving the depressed openings mentioned above; in other places the lung tissue had sloughed under the pleura, so that this latter alone remained, forming a thin septum between the pus of the empyema and the cavities in the lung. Finally, the cavities communicated at their central or narrower ends with several small bronchi (E).

Something more than mere perforation of an air vesicle and

FIG. 1

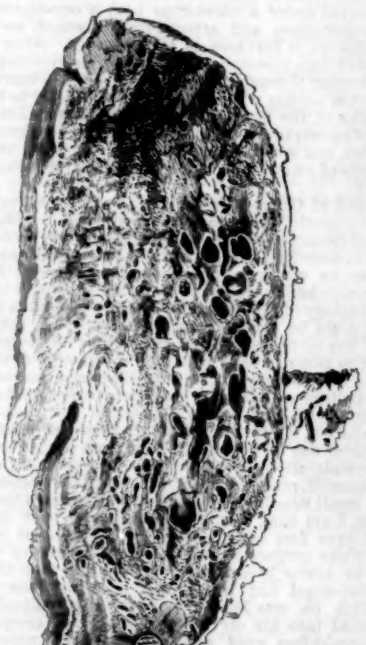


Section of lung at area of perforation (from photograph). A, Compressed lung. B, Pleura. C, Necrosed lung. D, Cavity. E, Piece of string through bronchus, communicating with cavity.

bronchus by the fluid had evidently occurred. A portion of lung tissue, owing to the pressure upon it, or to plugging of its vessels and arrest of its vascular supply, or possibly to inflammatory changes, had sloughed. Further, the fact that the pleura remained intact in several places, although the lung tissue beneath it had necrosed so thoroughly as to leave a cavity, suggested that the necrotic change preceded the perforation of the serous membrane, and the entrance of the pus; in fact, it seemed as though the necrotic change itself determined the site of the perforation. If, on the other hand, the perforation of the air vesicle occurred first, subsequent inflammatory and destructive changes in the lung, might be caused by the filling of the alveoli with pus; but it has always seemed difficult to understand why a collection of fluid pressing equally on the lung surface should cause perforation, unless there be also some primary change in the lung tissue itself, which would allow of its more easy destruction and so determine the site of the opening. It appears to me that the condition here described strongly suggests such a preliminary change in the lung tissue. Microscopical examination of the lung tissue immediately around this area showed a marked pneumonic change, while at a distance of a quarter of an inch the lung appeared healthy, though compressed.

A further very important point for consideration is the situation of the perforation in the lung. Mr. Marshall has shown that when an empyema perforates the chest wall, the tendency is for it to do so in front—namely, between the fifth and sixth costal cartilages, where the muscular interspaces are thinnest and weakest. Now in cases of empyema which I have observed, in which perforation of a bronchus has occurred, the collection of pus has been chiefly at the posterior part of the chest, and often limited to that area by pleural adhesions—being shut off, of course, from the anterior part of the thorax, where the chest wall is thin. In fact, it would appear that the seat of election for perforation is, in front, in the case of the chest wall, and in the case of the lung, at the back, somewhere near the posterior border and below the level of the root. The following observation may suggest an explanation of this fact. If a vertical antero-posterior section be made of a lung compressed by pleural effusion (Fig. 2), it will be seen that the larger tubes, both bronchi and pulmonary vessels, are arranged in a closely packed semicircle, with its convexity towards the spine; further, that this line

FIG. 2.



Vertical section, from before back, of lung compressed by pleural effusion (from photograph). Section passes at right angles to entrance of bronchus, and shows openings of bronchi and vessels arranged in a semicircle, with its convexity backwards towards spine.

of the openings of the tubes, is considerably nearer the posterior than the anterior border of the lung, and also that the tubes are more closely packed below than above. Any pressure therefore exerted on the lung tissue from without, as in the case of an empyema, would act most powerfully on this portion of the lung, compressing it against the rigid bronchi, which lie at this spot just beneath the surface, while, in addition, the thickness of the elastic cushion is less, and the distance between the surface of the lung and an air-tube of any size is shorter here than in other parts of the lung. In confirmation of this belief, I would observe that if, on the contrary, pressure be exerted on the lung tissue from within, as by the forcible injection

of water into a bronchus, perforation or rupture generally occurs near the anterior or thinner margin, probably owing to the fact that at this part, in most adult lungs, there is more or less emphysema, with consequent weakening of the walls of the alveoli. Speaking generally, then, an empyema situated at, or having access to, the front of the chest, will, if left alone, discharge by perforation of the chest wall; whereas one occupying the back part of the pleura will probably under similar conditions perforate the lung.

There is one other point in connexion with these cases to which I should like to draw attention. In many or most of the cases of empyema in which an opportunity has occurred of tracing the disease from beginning to end, the affection evidently commences in pleurisy with serous effusion, the fluid gradually becoming more and more turbid, until in a few weeks perhaps the purulent stage, or true empyema, results. The cause of this change would appear to be as follows, at any rate in some cases. The thick deposit of exudation composed of leucocytes and fibrin which occurs on the surface of the lung becomes partially or wholly detached owing to the shrinking and movements of the lung, and remains as shreds or sheets of loose membrane in the serous fluid in the pleural cavity, as may be found if the contents of the cavity be evacuated by an early incision and the interior explored with the finger. It seems probable, then, that these flakes act as foreign bodies, and by constant irritation bring about the conversion of a serous into a purulent effusion. Moreover, as these membranes take a long time to break up and disintegrate, they constitute one of the difficulties in the after-treatment of the case, often lying as they do below the level of the incision. In children, on the other hand, it is far more common to find the effusion purulent at an early stage in the history of the illness; it is thicker, more like the pus of an ordinary abscess, and is generally present soon after the onset of the inflammatory symptoms.

ON THE USE OF CHLORIDE OF AMMONIUM AS AN INHALATION IN DISEASES OF THE RESPIRATORY TRACT.

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SURGEON TO THE ADELAIDE AND THE THROAT AND EAR HOSPITALS, DUBLIN.

CHLORIDE OF AMMONIUM has been extensively used as a therapeutic agent, and its value in many affections of the mucous membrane of the throat has been very widely recognised. That such is the case is amply proved by the many forms of lozenges or so-called compressed "tablets" containing the salt which are more or less in vogue. In this form it has been found most useful in catarrhal conditions of the fauces and pharynx; but its use in posterior nasal catarrh, rhinitis, and catarrh of the Eustachian tubes and of the middle ear, as also in affections of the larynx, trachea, and bronchial tubes, has not been so encouraging, and the reason of this no doubt is that in the form of the powder, dry or in solution, or made into lozenges and given by the mouth, the salt cannot act locally on these regions, but only through the general system, and under such circumstances the benefit to be derived from its administration is more than doubtful. In order to overcome these difficulties and to extend the local use of the chloride to these less favoured regions, advantage has been taken of the fact, long since recognised, that the combination of the fumes of hydrochloric acid with ammonia gas at once forms a white smoke, which consists of chloride of ammonium in a finely divided state. This forms the basis upon which all chloride of ammonium inhalers are framed. The great therapeutical advantages to be derived from the chloride in this state has been long known and valued by throat and aural specialists; but general practitioners, as a rule, do not seem to have appreciated the good results which may be looked for by the judicious and regular use of the inhalation of chloride of ammonium. The cause of this probably has been the complicated nature of the apparatus often used to develop the vapour, the liability of its getting out of order or of its breaking, and the uncertainty as to the vapour containing the neutral salt alone, or perhaps also containing free hydrochloric fumes or free ammonia. The vapour (I employ this term here to express the white clouds formed by the junction of the fumes and the gas) when neutral is almost tasteless and perfectly unirritating, and it is in this form that it is of greatest use. Free acid I consider is always bad; a little free ammonia is not of much consequence, and is often of use. The method of detecting either the acid or the ammonia in the vapour I shall allude to again. Add to these objections the trouble of charging the inhaler with fresh acid and ammonia each time it is used, and we shall have a sufficient explanation of the reason why the inhalation of chloride of ammonium is not more popular among the members of the profession generally. For many years I have used this salt in this form extensively both in hospital and private practice, and have at different times tried most of the inhalers designed for developing it. I therefore venture to call attention to that form of inhaler which I believe will be found most simple and the most easily and satisfactorily managed, and also to point out the various classes of cases in which its use is most indicated.

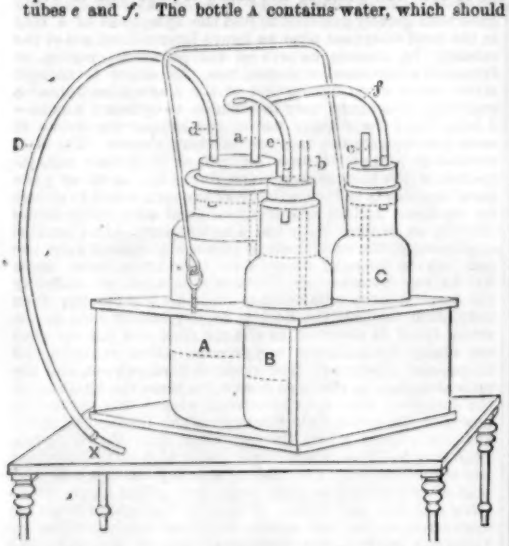
I have found the best results to follow the inhalation of chloride of ammonium in chronic catarrhal conditions. In acute catarrh it does little good—at least, when the disease is once fully established; but in the beginning of an acute catarrh I believe it will be found often to check its further progress. I have known it to be so in my own case, and have been greatly gratified to find the symptoms of a cold in the head disappear after an hour's intermittent use of the inhaler. In chronic catarrh of the post-nasal region, so frequently associated with deafness, due either to chronic otitis media or to obstruction of the Eustachian tubes—a condition sometimes very intractable to ordinary means—I have found the regular use of the inhaler for weeks or even months give the most satisfactory results. The best method of using it in nasal catarrh, or in chronic inflammation of the mucous membrane lining the nasal or post-nasal regions, is to inhale freely by the mouth and to exhale by the nose. In this way the chloride of ammonium comes directly in contact with the affected parts. In catarrhal conditions of the middle ear or of the Eustachian tube the salt can be brought directly to bear upon these parts by having recourse to Valsalva's method of inflating the ear. A deep inhalation is made by the mouth; then exhalation through the nose is begun, and as soon as the white cloud is observed to emerge from the nostrils they are closed by suddenly compressing them between the thumb and forefinger. The mouth is firmly closed, and the patient makes an effort, as it were, to force the air through the nostrils. The apertures being closed, the distending power of the exhaled air forces open the Eustachian tubes, and the vapour enters through them into the tympana. This may be done two or three times at a sitting without any evil effect. I have met with many cases where this plan of treatment has alone sufficed to effect a cure where other methods had failed. When the Eustachian tubes are obstructed, so that air cannot be forced through them by Valsalva's method, the occasional use of Politzer's bag during the earlier part of the treatment will usually suffice. In chronic laryngitis, especially of the catarrhal form, chloride of ammonium inhaled is of great value. In the early stages of that form of laryngitis which so often accompanies phthisis, when there is erosion of the mucous membrane covering the inter-arytenoid fold, or when there is chronic inflammation of the vocal cords themselves, I have seen good results follow from this vapour, more especially when combined with some volatile oil, such as oil of eucalyptus or pine oil, in a manner I shall immediately describe.

Again, much benefit may be derived from its use in affections of the trachea and bronchial tubes. Some years ago I prescribed it for an elderly gentlemen who was confined to his room in the beginning of winter for a chronic cough. He had been liable to chronic bronchitis every winter, which kept him in-doors for several months. Most of the usual remedies had failed with him, so at last I determined to try the effect of chloride of ammonium as an inhalation. He was directed to use it three times a day for fifteen minutes at a time. In a fortnight he was sufficiently well to go out, and the use of the inhalation during the winter prevented the return of his bronchial trouble.

The best method of inhaling in laryngeal or bronchial cases is much the same as is used by smokers in inhaling from cigarettes. A mouthful of the vapour is first taken, followed at once by a deep inspiration of ordinary air; this

carries the chloride well down into the bronchial tubes. If this is not done, the vapour may perhaps not travel beyond the pharynx.

The apparatus for developing the chloride of ammonium which I prefer to all others is the Burroughs Improved Chloride of Ammonium Inhaler (Vereker's patent), a drawing of which is annexed. As it is comparatively of recent date, I may be excused for shortly describing its *modus operandi*. It is essentially composed of three bottles connected together by tubing. The two smaller bottles (B and C) contain respectively solutions of ammonia and of fuming hydrochloric acid. I have found that the pure commercial acid acts the best. The pure acid of the British Pharmacopœia is scarcely fuming enough, and is much more expensive. Each of these bottles is provided with an indiarubber cork, with two perforations each. Through one of these holes passes down in each case a glass tube (*b* and *c*), open at each end. This should dip down well into the fluid in the bottle. Two short tubes pass through the other holes. These should only reach to just below the cork. The outer end of each of these short tubes is connected by means of indiarubber tubing (*e* and *f*) with a glass tube (*a*). This glass tube reaches down nearly to the bottom of the bottle A, and its upper extremity terminates in a cross tube open at both ends, to which are attached the ends of the tubes *e* and *f*. The bottle A contains water, which should



fill about one-third of it. A short glass tube also passes through the rubber cork of the bottle A, but does not extend beyond it into the bottle. To the outer end of it is attached a long rubber tube (D), with a mouthpiece (X) attached to its free end. This tube (D) is usually made too short for convenience, and I generally advise patients to procure a long piece of tubing. When the tube is short the patient has to hold up the inhaler, and is incapable of doing anything else during the time of inhalation; but with a long tube the inhaler can be placed on a table beside him, and the patient can read or write all the time, and thus a more regular use of the inhaler is probable. From the foregoing description it will be seen that when the patient inhales through the tube D, a vacuum is formed in the bottle A, and the air in the bottles B and C rushes in to take its place through the tubes *f*, *e*, and *a*. These bottles are again replenished with air through the tubes *b* and *c*. As the air passes down through the tubes *b* and *c*, it bubbles up through the ammonia and acid in B and C respectively, and consequently becomes charged with their vapours. These vapours meet in the tube *a*, and at once form chloride of ammonium. The air charged with this salt bubbles up through the water in A, and is thus washed before it is inhaled through D. When exhaled it is seen to emerge as a dense white smoke. Now, in order that this should be neutral—that is, that the vapour should contain no free acid or ammonia—it is essential that the bottles B and C should contain the proper proportions of their respective fluids in equal volumes. Suppose C contains half an ounce of pure commercial hydrochloric acid, B should contain half an ounce of equal proportions of the ordinary solution of ammonia and water. Should this be found too strong, a little of it may be poured out and the same quantity of water added. If it be too weak, less water and more ammonia should be used. A little practice will make the patient expert in regulating the proportions. The acid bottle should not be interfered with unless the acid has become so weak as to require to be changed for a fresh charge. I have generally found that the acid will not require to be changed oftener than once in two months. On the other hand, the ammonia is so volatile that it will require strengthening, perhaps once a week, sometimes more frequently. The plan I adopt myself is simple. When I have found that the charge of ammonia has become disproportionately weak, I add two or three or five drops of strong solution of ammonia to it, until I find the vapour has become quite neutral. I have already said that the vapour inhaled should be perfectly unirritating. I have found from experience that when the ammonia is too strong it causes a smarting sensation at the back of the *pharynx*. When, however, the acid is in excess—that is, when the ammonia is too weak—the vapour chiefly affects the *larynx*, when a burning feeling accompanied by *coughing* and sometimes a sensation of choking is experienced. This affords, then, a good guide as to whether the ammonia should be strengthened or weakened. Another point deserves attention, and that is that the ammonia, being so much more volatile than the acid, has a tendency to pass over through the tube B into the water in the bottle A, and thus the vapour when passing through the water may take up an excess of ammonia gas. This is easily obviated by changing the water in A every second or third day. When it is considered desirable to add any other substance, such as oil of eucalyptus, to the vapour to be inhaled, the simplest and best plan is to add every day, say, five drops of the oil to the water in the bottle A. As the vapour bubbles up through this water, the oil globules become agitated and broken up, and the vapour carries with it a very sensible amount of the volatile oil. I have found this extremely useful. A great advantage which this form of inhaling these oils possesses is that they are inhaled cold, and therefore the patient is not exposed to the risk of catching cold, if obliged to leave the house shortly after inhaling.

I believe that if this inhaler be more largely tried in general practice, it will be found that all I have said in its favour, more particularly as to the results of its use, will be found to be borne out by individual experience.

Dublin.

VENEREAL DISEASES IN GIRLS OF TENDER AGE.

BY FREDERICK W. LOWNDES, M.R.C.S. ENG.,
SURGEON TO THE LIVERPOOL LOCK HOSPITAL AND LIVERPOOL POLICE.

OF all the cases in which medical evidence is required, few, if any, are less inviting than those in which men are charged with criminal assaults on females of tender age. To a conscientious medical witness who has carefully perused the chapters on rape in the various medico-legal works of Casper, Taylor, Ogston, Guy, and Tidy, the responsibility appears to be very great; for any remissness on his part to state every circumstance which may be favourable to the accused on the one hand, or to strengthen the case for the Crown on the other, may be productive of the most serious consequences. In the former case it may lead to the conviction of a man who is perfectly innocent of the crime with which he is charged, and his sentence to penal servitude for a considerable portion of his future life; while in the latter case it may assist in the acquittal of a guilty man—guilty of as vile an offence as a man can be guilty of. In addition to this grave responsibility, the details and surroundings of these cases are of so gross a nature that, as a learned judge (Justice Wills) recently remarked in his address to a grand jury, "men of mature life could hardly wade through the mass of iniquity which he had to struggle through in these matters without feeling himself degraded and poisoned by their perusal."

If any apology were needed for this paper, I trust that its heading will be sufficient. The subject was brought to my

notice in a very prominent manner immediately after my election (more than eleven years ago) as surgeon to the Lock Hospital. The very first female patient admitted under my care was a diminutive girl whose age was stated to be twelve years, who looked even younger, but who was really just over thirteen. Since then other cases of infected children have been brought to the hospital, making up to the present date a total of twelve cases. There are two points to which I would wish to direct special attention. The first is that under existing circumstances we can hardly expect a reduction in the number of these offences. For as the recently passed Criminal Law Amendment Act now makes carnal knowledge of a female under thirteen years of age a felony, and under sixteen years a misdemeanor, even with her consent, it naturally follows that this Act has created a new class of felonies and misdemeanors. The other point is that in all these cases there was some evidence of infection with gonorrhœa or syphilis, and in at least three of them it was clearly proved that the accused persons who were suffering from a similar disease hoped to effect a cure by having sexual intercourse with their victims. This horrible superstition still prevails largely in Lancashire as in other parts of England, and as it must from the very first have proved to be as false as it is filthy, it is lamentable to observe how long it has prevailed. So far back as 1827 the late Dr. Gordon Smith alluded to it in his Principles of Forensic Medicine (3rd edition, page 413), and most writers on forensic medicine allude to this superstition more or less briefly. Thus Casper says: "It is well known that among the lower classes there prevails an absurd and horrible opinion that a venereal complaint is most certainly and quickly cured by coitus with a pure virgin, and most indubitably with a child, and this explains the very numerous cases observed by us."[1] Taylor says: "There is a vulgar error prevalent that gonorrhœa in the male is cured by sexual intercourse with a female virgin; and this error is said to be the cause of the frequency of the crime of rape on children in England."[2] Tidy says: "In a very large proportion of the cases sent for trial the victims are young children. There are several reasons for this. One is the popular superstition that if a man suffering from gonorrhœa have intercourse with a virgin he will be cured. Disgusting as it may seem, it is no less a fact that old women doctresses not unfrequently prescribe this criminal attempt to young men who consult them for urethral discharges. Many cases recorded show this to be the fact."[3]

The following is a summary of the cases which have been seen in the Lock Hospital within the last eleven years:—

No.	Date.	Name.	Age.
			Years.
1	May 20th, 1875	M. McD——	13
2	August 11th, 1876	M. E. S——	11
3	August 24th, 1881	S. A——	12
4	August 24th, 1881	G. S——	9
5	December 14th, 1881	E. S——	12
6	March 20th, 1884	A. C——	14
7	July 24th, 1884	E. R——	11
8	September 11th, 1884	M. E. M——	7
9	September 18th, 1884	E. A. Y——	12
10	September 14th, 1885	M. H——	4½
11	February 16th, 1886	J. A. G——	9
12	March 30th, 1886	A. H——	14½

At the present date (Oct. 18th) we have in the female wards a girl aged thirteen suffering from ulcers of the labia under Dr. Bernard's care. There are also two imbecile females in my ward, one suffering from syphilis, the other from vaginal discharge. In none of these cases can the offenders be prosecuted.

Besides these, I have seen other cases in private practice. In one which was brought to me by the late Mr. Higginson, a girl was infected with syphilis by, as was stated, a lad whom she met in the street one Saturday afternoon. Mr. Higginson had informed a police-inspector of the case, but the lad was wholly unknown to the girl, and she could give no satisfactory description of him.

In all the cases of syphilitic infection the disease was most amenable to treatment, a mild mercurial course, and soothing applications to the primary ulcers producing a most marked improvement in a very short time. For condylomata yellow wash acted extremely well after a previous application of lead and opium lotion. The vaginal discharges readily yielded to cleanliness and alum injections carefully applied by the nurse.

There remains to be noticed a very important matter upon which much difference of opinion still exists. I refer to the right of a medical practitioner to examine an accused person at the request of a magistrate or police official. I have never done this without the permission of the person charged, given in the presence of at least one witness. Moreover, I have always, in addition to obtaining his consent, fully explained that the result might be in his favour or against him, but that whatever it might be I was bound to state it. If after this full explanation he consents, I have no hesitation in examining him. Although the consent of the accused is mentioned as requisite in both Taylor's[4] and Tidy's[5] works, there are members of our profession, barristers, and police officials, who appear to hold a contrary opinion. In view of the almost epidemic form of actions against medical practitioners, which we are still experiencing, it appears to me to be of paramount importance not only to decline to make any compulsory examination, but to be absolutely certain that consent is given, not in ignorance, but in full knowledge of all the consequences.

In conclusion, I would wish to say that, while the experience of all the foregoing cases shows how little reliance could be placed upon the statements of at least some of these girls, it is perfectly clear that what is now considered a misdemeanour was committed upon all of them, while in nine cases they were under the age of thirteen, which makes it a felony under the existing law. I fear that there are many other cases (where fortunately for the females there has been no infection with disease) which do not come to light. In this city all such cases are most severely scrutinised before they are sent to trial. Then the grand jury, acting under the direction of the judge, are quite prepared to throw out the bill in any case which appears to them to be a weak one. Lastly comes the trial itself. The judge, the counsel on both sides, and the men who compose the common jury are all fully aware how easy these charges are to make and how difficult to disprove. A calm dispassionate review of our judicial system as regards these cases will, I think, convince most medical observers that it is admirably adapted to fulfil its purpose: to prevent, on the one hand, any man from being put upon his trial for a groundless or weakly supported charge: and, on the other hand, to punish severely those men who commit such cruel outrages on children of tender age.

Liverpool.

[1] Handbook of the Practice of Forensic Medicine, Balfour's translation, vol. iii., p. 301. [2] Medical Jurisprudence, 3rd ed., vol. ii., p. 427. [3] Legal Medicine, part ii., p. 184.

[4] Op. cit., vol. ii., p. 461. [5] Op. cit., p. ii., footnote on page 205.

PURULENT ENCEPHALITIS WITH OBSCURE SYMPTOMS OCCURRING IN A PREGNANT WOMAN AT FULL TERM;

CHILD SAVED BY ABDOMINAL SECTION (PORRO'S OPERATION).

By W. ALEXANDER, M.D., F.R.C.S.,

VISITING SURGEON, LIVERPOOL WORKHOUSE HOSPITAL.

ELIZABETH W——, aged twenty, was admitted to the division for pregnant women of the Liverpool Workhouse on Oct. 14th, 1886. She did not complain of anything on admission, but was regarded by the other women in the division as "distant and snappish," and when spoken to would tell the speaker to "mind her own business" and "not to bother her." She complained to the doctor on duty on the 16th of headache, but she said it was not much, and probably owing, she thought, to the onset of labour. On Oct. 18th she was taken to the lying-in wards on the suspicion of labour having commenced, but it was found to be a "false alarm." Next morning she went again, but no signs of labour presented themselves. She then seemed to the midwife to be quite well. On the evening of the 19th she looked restless before retiring to bed, but did not complain, and during the night she got up several times to drink water. Towards the morning, on returning from the water-bottle, she fell three times across the beds that intervened. The nurses from the lying-in wards were then sent for, and found the patient in a "hysterical" convulsion, confused in her manner, but quite conscious except when "working" in her fits.

On Oct. 20th, as I was going through the lying-wards of the hospital on my usual rounds, my attention was called to this patient, who was still in the pregnant women's division. Her face was somewhat congested, she was slightly unconscious, and was suffering from irregular convulsive movements that seemed partly voluntary and partly involuntary. No signs of labour were to be found, but she seemed to be at full term and the fœtal movements were very distinct. The substance of the history just given was then told to me. The case was diagnosed as one of puerperal convulsions occurring during pregnancy, and probably caused by a debauch. As her bowels had been already moved, and as she could not swallow, a rectal injection of thirty grains each of chloral and bromide of potassium was prescribed, to be repeated according to necessity.

I visited the hospital again in the afternoon, at 6.30 P.M., and found that the coma had deepened very much during the last half-hour; the convulsions had become more decided and epileptiform, affecting chiefly and primarily the face and arm centres for the left side, but extending often into a storm that involved the whole body. The eyes gave the faintest response to pressure, and the pulse was scarcely perceptible. Mustard to the legs, frictions, &c., had been tried without effect, and Dr. McMurray, who had watched the case carefully during the day, had already come to the conclusion that the patient was dying. A short examination convinced me that he was right, and that the "status epilepticus" into which the patient had fallen was one from which she was not likely to recover. The child was still moving, but less vigorously than at midday, and it was evident that whatever was to be done would have to be done quickly. An examination per vaginam showed that the os uteri was still firmly closed, that the vagina was dry and undilated, and that there was an entire absence of any signs of labour. The removal of the child *per vias naturales* would, it seemed to me, be too slow to save the child and relieve the mother. Abdominal section offered the best chance, especially as I am quite familiar with and very successful in the performance of this operation for various diseases. Nurses were immediately detailed to wash the woman with warm soap-and-water and with corrosive sublimate solution; the spray was got in readiness, and the sponges that are always kept at hand for an "emergency" abdominal section were brought to the lying-in ward, as this ward is very clean and was then fortunately empty of any case in labour.

The uterus was exposed by an incision four inches long. Through the uterine walls the placenta could be seen adherent to the part just beneath, and over the placenta some large veins were distinctly visible. Dr. McMurray kept the abdominal wall closely applied to the uterus, and surrounded the opening I was about to make into the uterus with sponges. This opening I made in a longitudinal direction for two inches in a spot free from large veins. A gush of venous blood was the result of the incision. This was immediately stopped by the insertion of two fingers into the uterine wound. By means of these two fingers the placenta was stripped off the uterus, and on their withdrawal the hæmorrhage had ceased. The opening was now enlarged upwards and downwards until a sufficient opening was made to enable the placenta and afterwards the child to be removed. As the child was removed Dr. McMurray expressed the womb outside the abdomen, thus closing the abdominal walls around the organ, so as to completely shut the abdominal cavity and protect the intestine. All this had been done without chloroform and without a movement of the patient. The midwife now took charge of the child and placenta, and the question was what was to be done for the mother. The screaming of the child that we now heard showed that *one* life was saved. I was disappointed that the operation had not roused the patient, which I had hoped it would, and Dr. Blackwood had been standing by ready with chloroform and watching for any sign of consciousness. As the woman was young, and all the internal organs healthy, I would have liked to have stitched the womb up and left her undeprived of any organ; but this operation would have taken time, and would have allowed some risk from hæmorrhage, which might have destroyed any remaining chance of life, and the chance seemed already a very desperate one. I therefore quickly performed a "Porro," and, covering the abdominal wound with antiseptic sponges, endeavoured to resuscitate the patient. Stimulants per rectum, subcutaneous injections of ammonia and ether, artificial respiration, galvanism, &c., were tried for about an hour, but the failing pulse gradually disappeared and death ensued.

Next morning a sister of the deceased told us that the latter had led an intemperate and profligate life, and had been beaten just before admission.

An examination of the body showed slight contusions, but none greater than she might have obtained during the convulsions. On opening the skull, a thin layer of pus was found beneath the dura mater, covering the whole of the encephalon, and extending down to the base of the skull. There were no signs of any injury to the brain or skull; the lungs were congested, and all the organs showed signs of excessive indulgence in drink, but otherwise they were healthy.

The baby is a plump healthy girl, who takes to her bottle with avidity, and seems to enjoy the life into which she was so tragically ushered.

When I was house-surgeon at the Workhouse Hospital in 1873, a woman was brought in suffering from convulsions. Just as my colleague, the late Dr. A. M. S. Hamilton, saw her, for the purpose of locating her, she had a sharp convulsion, and died in the cab. We immediately took her into the nearest room and performed Cæsarean section. A fine, well-formed, well-matured infant was removed, but quite dead. In my last case the result has been better, although I was disappointed that the coma did not yield to the stimulation of the operation. Had the coma depended merely upon essential puerperal eclampsia, the operation, the gush of blood, and the emptying of the uterus might have done good, and saved mother as well as child. The imperfect history of the case obtained before death, and the latency of the symptoms before convalescence set in, did not prepare us for the startling lesion found at the necropsy. Altogether, I do not think any improvement could have been made either in the time of the operation or the kind of operation, and a fuller knowledge of the case would not have secured any better results.

ON A CASE OF

TRAUMATIC TETANUS SUCCESSFULLY TREATED BY THE SUBCUTANEOUS INJECTION OF MORPHIA.

BY J. FALCONER MURISON, M.B., C.M. ABERD.

ONE of the most appalling and fatal maladies to which man is liable is traumatic tetanus. The following case, which came under my care nearly twelve months ago, will, I think, be of some interest to the profession.

On Jan. 29th, 1886, I was sent for to visit a young man whose "jaws were stiff and would not open." I found him in bed, complaining of great stiffness in his jaws, and a peculiar feeling when he attempted to swallow food or drink. He was twenty-six years of age, over six feet in height, and powerfully built. On questioning his parents I elicited the following facts: On Jan. 15th he was engaged, along with a servant lad, carting manure from the farmyard to the fields. He asked the lad to hand him a spade, which he (the lad) at once took up and threw towards the patient. The distance between them was only six yards, and the spade struck the patient severely on the inside of the left knee-joint, causing at the time excruciating pain. The part was badly bruised, but although in severe pain the patient continued at his work all that day. In the evening the pain increased and the knee-joint became swollen and stiff. For the following ten days he was confined to bed, during which time he constantly applied fomentations and poultices to the knee. The swelling and pain disappeared, and he resumed his ordinary duties, feeling nothing whatever the matter with him, until the 29th, when the first symptoms of tetanus made their appearance.

When I first saw this young man he was suffering intensely. The jaws were firmly clenched, and he experienced some difficulty in swallowing. The muscles of the temples, jaws, and neck were stiff and rigid, the features were fixed, and the countenance expressive of acute pain. Risus sardonicus was well marked, giving a comical expression to the face. I saw at once that I had to deal with a very serious case, and, as the patient was lying on a bed in the farm kitchen, I had him removed at once to a cool, quiet, and airy bedroom, a screen being drawn round his bed and perfect quietness enjoined. His temperature was 104°, his pulse 90, and his body covered with free perspiration.

The treatment consisted of thirty grains of hydrate of chloral, with twenty grains of bromide of potassium, given every four hours. This was continued for three days, at the end of which time the patient was in no way benefited; he did not even sleep. The symptoms increased; the muscles of the back and legs became involved; and during the paroxysms opisthotonos was well marked and excruciating pain felt at the pit of the stomach. Tincture of cannabis Indica was then tried, the dose being fifteen minims at first, gradually increased to half a drachm, with inhalation of nitrite of amyl. This was also given every four hours and continued for three days, at the end of which time there was still no improvement visible to the patient. Ice was applied to the spine, and he was put under the influence of chloroform twice a day for an hour at a time. Still the paroxysms continued as bad as ever, if not worse, and as the patient had got little or no sleep for the previous week, I determined to try the effects of morphia. I therefore injected subcutaneously one grain and a half into the muscles of the right thigh, and awaited the result. In about half an hour he was dozing, and continued so for about two hours. On awaking he felt himself greatly relieved, and begged hard to have the injection repeated, as he was unable to suffer such severe pain. The medicines were now all discontinued and the subcutaneous injections of morphia thereafter solely relied on. For four days one grain was injected every four hours, for the next two days every six hours, and the next two days every eight hours. Then, as the symptoms gradually disappeared, the injections were used less frequently, until at the end of the third week only one grain was injected at night, with an occasional half-grain through the day. During the fourth week only half a grain was injected at night, and during the fifth week only every alternate night. At the end of the sixth week the patient was convalescent, and was able to be out of bed and to do without the morphia. During the whole time of his illness, which extended over a period of six weeks, his nourishment consisted of beef-tea in a concentrated form, milk, switched eggs, soups, wine, and brandy, all being given freely.

I think this case will interest not a few, owing to the marked benefit the patient derived from the subcutaneous injections of morphia, after the usual remedies—chloral hydrate, bromide of potassium, cannabis Indica, ice, &c.—had been thoroughly tried and completely failed to relieve him of a single symptom of this terrible disease. So much am I convinced of the benefit accruing from the use of morphia in this particular case that, were I called upon again to treat another case of a similar nature, I should have no hesitation whatever in beginning the treatment at once with a full dose of the solution of morphia injected hypodermically.

Glasgow.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

PYLORECTOMY FOR CARCINOMA; DEATH; NECROPSY.

(Under the care of Mr. HENRY MORRIS.)

THE following instance of operation for carcinoma of the stomach, in which the growth was situated at the pylorus, appears to have been performed in one of those cases which are especially adapted for the operation of pylorectomy. The growth was limited in extent, free from adhesions to the surrounding parts, there was no affection of the glands in secondary deposits, and the patient was comparatively young, being only thirty-nine years of age. The progress after operation was for a time satisfactory, and although the patient died, few surgeons of experience would hesitate to adopt the same line of treatment in a similar case in preference to the alternative operations of gastro-enterostomy, duodenostomy or ejunostomy, which are only palliative For the report of the case we are indebted to Mr. W. Roger Williams, surgical registrar.

The patient, a very emaciated woman of dark complexion, aged thirty-nine, was admitted under the care of Dr. Finlay on July 9th, 1885, with the following history:—She has suffered from dyspepsia since youth. Symptoms of the present disease began nine weeks ago with an attack of jaundice, which lasted for a month. During this illness constipation, nausea, and vomiting were marked symptoms, and have continued so ever since. A month ago she first noticed a "lump" in the upper part of the abdomen, which was much the same size then as now. During the last five weeks she has lost much flesh. She has never had good health. In addition to dyspepsia, she has frequently been subject to a hacking cough, with much expectoration, and shortness of breath. Twenty years ago she had rheumatic fever. She married at twenty-six, and has had seven children, four of whom died in infancy, and of the others one has a "weak chest."

On admission she complained of a sinking feeling at the pit of the stomach, constipation, and flatulence, with nausea and vomiting after taking food. The bowels had not acted for a week. The conjunctivæ were slightly yellow, but there were no other signs of jaundice. On examination of the abdomen, a freely movable, hard, nodulated mass, the size of a hen's egg, was felt a little above and to the left of the umbilicus; sometimes its position shifted to the right of the umbilicus. There was dulness on percussion over the tumour, to which all her pain was referred. The tumour was not affected by movements of the chest. The liver dulness extended from the sixth rib to the costal margin; the splenic area was normal. The urine was free from albumen, and its specific gravity 1016. A loud blowing bruit, which replaced the first sound of the heart, was heard at the apex and at the angle of the scapula. A loud systolic bruit was also heard over the second right costal cartilage. After admission the vomiting continued, and on July 20th she ceased to retain nutrient enemata. Death from starvation seemed imminent.

At a consultation on July 24th it was decided to make an exploratory abdominal section, with a view to pylorectomy, in the event of the tumour being free from important adhesions, and the adjacent glands &c. uninvolved; otherwise gastro-enterostomy or jejunostomy was to be done.

On July 26th and 27th the stomach was washed out with a warm weak solution of boracic acid. This was repeated on the morning of the 28th, shortly before commencing the operation. At 9.30 A.M., assisted by Mr. Gould and Mr. Paul (the house-surgeon), Mr. Morris proceeded to open the abdomen by a longitudinal incision, four inches long, made a little to the right of the umbilicus and having its centre over the tumour. On opening the peritoneal cavity, the enlarged and hard pylorus was at once reached. It was quite free from adhesions, and was readily withdrawn through the wound. No enlarged glands could be felt, and the adjacent parts seemed normal. The omentum above and below the diseased part was ligatured with two rows of catgut sutures, and then divided between the rows. The pylorus and the adjacent parts of the stomach and duodenum being thus completely freed from their omental connexions, a flat sponge was placed beneath the diseased area, and the division of the stomach was then commenced at the small curvature and carried obliquely downwards and to the right, just along the anterior and then along the posterior surface for about half the distance between the great and small curvatures. All bleeding points on the cut surface being stopped by pressure forceps, the incisions were extended by a succession of short snips. As soon as the stomach was sufficiently laid open, its contents were removed by the introduction of sponges on long forceps; thus extravasation of its contents into the peritoneal cavity was avoided. Before completing the section of the stomach some occlusion sutures were introduced. As soon as the separation of the stomach from the diseased mass had been completed, a couple of silk loops were passed through its sero-muscular coats, and the cut edges were retained outside the abdomen whilst the separation from the duodenum was being effected. Finally, the divided duodenum was united to the stomach by numerous sutures, the posterior ones being introduced first. Part of the duodenum, through which the section passed, was devoid of peritoneal investment; so that in effecting the union of the divided viscera, for a certain extent, the apposition of serous surfaces was interfered with. This

was a circumstance of importance, because it was in this situation that the sutures subsequently ulcerated through and allowed extravasation into the peritoneal cavity. Lembert's method was alone employed for the first ring sutures, and Lembert's alternating every three or four with Gussenbauer's suture for the occlusion suturing. The operation lasted nearly two hours and a half.

The patient was a little sick after returning to bed. Enemata of port wine (three ounces) and peptonised beef-tea (three ounces) were given alternately, the first port-wine enema being administered two hours after the operation. During the afternoon and evening she complained of intense thirst, and a teaspoonful of iced water was allowed by the mouth at intervals. There was a slight motion of the bowels at 6.30 A.M., one hour after a port-wine enema, and again slightly at 8 P.M., when she passed eight ounces of urine. Evening temperature 100·4°; pulse 120. During the night she slept for about six hours and a half.

On the morning of July 29th she still complained of intense thirst, for which a teaspoonful of iced barley-water was given from time to time. This she retained. The enemata were continued every four hours, and five minims of liquid extract of opium were added to the beef-tea injections to assist their retention. There was a slight motion of the bowels; no sickness. Morning temperature 98·6°. She passed another fairly good night.

July 30th.—She still complained of great thirst. Temperature 99°. Six ounces and a half of urine passed during the last twenty-four hours. Enemata retained; no vomiting. At 9 P.M. the bowels acted freely, the motion being of a dark-grey colour. Rectum irritable, and the enemata but partially retained. During the day she slept for about six hours. At 10.30 P.M. she vomited about half a pint of dark-brown odourless fluid, and again at 1 A.M. She slept for about six hours and a half during the night.

31st.—Morning temperature 98·6°. She has passed seven ounces of urine during the last twenty-four hours. Most of the enemata are retained. At 11.30 A.M. she complained of a sharp pain in the epigastric region, screamed loudly, and then vomited several times. At 1.30 P.M. the wound was dressed for the first time; it looked normal; the sutures were not disturbed. During the afternoon the patient continued to complain of pain in the abdomen; she was sick at intervals, and the enemata were not retained. At 9.30 P.M. she was very weak and much changed for the worst. She still vomited occasionally. Temperature 101°. During the night she had no sleep, was very restless, and died in a state of collapse at 4 A.M. on August 1st.

Necropsy, ten hours after death.—Body exceedingly emaciated. The peritoneal cavity contained about eight ounces of sero-purulent fluid. There was recent acute general peritonitis, the intestines being injected and glued together by recent lymph. The left lobe of the liver was adherent to the anterior surface of the stomach. The stomach occupied a position that was almost vertical; it was small and contained some fluid. On close examination of the operation lesion, it was found that all the occlusion sutures and all the ring sutures that were on the peritoneal aspect were quite secure and well embedded in lymph. It was at the posterior and upper part of the wound, near where the occlusion sutures joined the ring sutures, that some of the latter had ulcerated through and allowed the gastric contents to escape. These were found occupying a small pouch immediately behind the gap. There were no cancerous glands adjacent, and no secondary deposits in other parts of the body. The lungs were small and emphysematous. There were old pericardial adhesions. Both auriculo-ventricular valves were competent, but they presented much old thickening. The aortic valves were thickened, calcareous, and incompetent. The heart was rather large. Both kidneys were small and granular.

WEST LONDON HOSPITAL.

CASE OF PARTIAL PARAPLEGIA, PROBABLY DUE TO SYPHILITIC MENINGITIS; RECOVERY; REMARKS.

(Under the care of Dr. DONALD W. C. HOOD.)

C. H——, aged twenty-eight, a stonemason, was admitted on Jan. 18th, 1886. He complained only of great weakness in both legs. He was unable to walk more than a few yards. He dated his illness from the evening of the 24th ult., when he had felt much fatigue after a short walk, and had stiffness and cramps in the calves of both legs. During the preceding week he had had seminal emissions every night, and irritability of the bladder night and day. From the morning of the 25th up to the day of admission the weakness in his legs rapidly became more and more marked. He was unable to retain his urine longer than an hour at a time. The patient was a strong, muscular, healthy-looking man. He had had no previous illness of moment, but had suffered from a chancre some seven years before. The chancre was not followed by sore-throat or by any constitutional trouble. There was great loss of power, equally distributed in both lower extremities. He could barely move his legs as he lay in bed, and could only stand or struggle along a few yards with the greatest effort and fatigue. There was complete loss of all reflexes below the abdominal; if anything, these were in excess. The cremasteric were entirely absent. The limbs were muscular, and there was no wasting. Sensation appeared perfectly normal, and the patient made no complaint of pain. The spine was carefully examined, but no trace of bone disease could be discovered. The muscular power of the upper limbs and trunk appeared natural. On the supposition that the patient was suffering from syphilitic inflammatory mischief he was at once placed on iodide of potassium and perchloride of mercury. Under this treatment the patient made rapid progress towards recovery, recovery being, however, impeded by a sharp attack of tonsillitis, which at that time was almost endemic in the hospital. The first indication of improvement was the lessened irritability of the bladder; then muscular power returned by degrees, the patient being able to move and turn in bed without effort. A month after admission there was some return of plantar reflex, the patellar and cremasteric being still absent. The patient could now stand without difficulty, and could walk across the ward. A month later the muscle power was noted as being fairly normal, and within a few days the patient was discharged as well.

Six weeks subsequently the patient reported himself as well as he had ever been, and able to walk any reasonable distance without fatigue. At this time there was still no patellar reflex.

Remarks by Dr. HOOD.—There can be but little doubt that the lesion in the above interesting case was a circumscribed inflammation of the spinal meninges, lying somewhat above the lumbar enlargement of the cord. The inflammatory mischief was probably gummatous in character, and must have been limited to the anterior portion of the cord, the substance of which could scarcely have been affected, looking at the rapid and perfect restoration of muscular power. I conclude that the inflammatory products involving the internal surface of the dura mater compressed the anterior surface of the cord and implicated the motor roots.

BURTON-ON-TRENT INFIRMARY.

CRUSHED PELVIS; RUPTURE OF THE BLADDER; NECROPSY; REMARKS.

(Under the care of Mr. MASON.)

For the following notes we are indebted to Mr. A. P. Trinder, house-surgeon.

Thos. P——, aged thirty-six, was admitted on Nov. 1st, 1886, at 6.30 P.M. The patient, a powerful man, a shunter in one of the yards, was riding on the spring of a waggon, when passing some points, on which he had himself placed some trucks without allowing proper space between them and the main line, he was caught by the buffer of the nearest one on the left hip, twisted round by it, and so crushed that his hips passed transversely through a ten-inch space. Having passed the obstacle he fell, and was immediately brought to the infirmary by his mate, who, being behind him on the same waggon, saw what occurred and saved himself. The patient was never unconscious.

On admission, the hands and feet were slightly cold; body warm; pulse regular, and of fair volume; temperature 98·4°. The man complained of great pain in the hypogastrium. The perineum and left hip were slightly bruised and painful, but not much swollen. He could not lift his thighs without assistance, especially the left. He asserted positively that he had passed urine within an hour of the accident. Mr. Mason saw him, and on account of the pain passed a No. 8 silver catheter, which entered the bladder easily, but, to his surprise, drew off bright-red blood. The catheter was kept in. An ice-bag was applied over the

pubes, and beef-tea and ice were given by the mouth. He was also ordered twenty minims of liquor morphiæ, which was repeated later on.

Nov. 2nd.—Very little sleep last night; body warm; pulse quiet, of fair volume; temperature 99°. Taking iced milk and beef-tea pretty well. Pain diminished; no pain in the abdomen on pressure, except over the pubes; no dulness on percussion anywhere except over the bladder, which reached two inches up. The catheter has drawn off a considerable quantity of bright blood and urine. A consultation was held as to operating, but delay was advised, as the hæmorrhage had abated and his condition was good.

3rd.—Slept well; temperature last night 101°; to-day 100°. Catheter blocked with clot, and exchanged for a soft red rubber instrument; very little blood, and of a blacker colour. Bowels cleared out by enema.

6th.—Doing well; sleeps and eats fairly. Catheter drawing nearly clear urine, but has been often blocked by clots. Bladder repeatedly washed out with 1 in 300 carbolic solution, as the urine smells very foul. Temperature 101·2°; pulse 120.

8th.—Doing well, except that he had another smart hæmorrhage from the bladder to-day. Perineum rather more swollen and discoloured, but not prominent as in ruptured urethra. Temperature 100°; pulse 120, steady. At 3 P.M. another consultation was held, but the hæmorrhage having again ceased, it was considered advisable to leave him alone, as it would probably be impossible to control the bleeding vessel, which was supposed to be the internal pudic artery ruptured by a fracture of the pelvic ramus. Very foul gas escapes along the catheter.

9th.—Slept all night. Takes food better. Catheter drains well; no more hæmorrhage. Temperature last night 101°; to-day 99°. On pressure over the right side of the pubes emphysematous crackling can be plainly felt, and foul gas is expelled from the urethra. For fear of infecting the ward, he was carried, mattress and all, into a small special ward, without experiencing any pain or producing any hæmorrhage. At 9 P.M. he had a rigor, and the temperature was 102·5°. Mr. Mason made two small incisions—one in the perineum, which led nowhere, the other over the crepitating region to the right of the pubes, the latter incision giving vent to horribly offensive gas and urine, which dribbled slowly on syringing through the catheter. At 3 A.M. the temperature was 103·6°, and the pulse 160, weaker, slightly irregular. Two ounces of brandy ordered.

From this time the patient lost ground in spite of a large amount of fluid food and from two to four ounces of brandy daily. The temperature ranged from 101° to 103·8°, and the pulse from 120 to 150, and becoming smaller and weaker. Two small hæmorrhages occurred, and diarrhœa ensued, followed by death on Nov. 17th. The smell during the last week was overpowering, in spite of sanitas and carbolic sprays.

No regular post-mortem examination was made, but the pubic wound was enlarged to admit two fingers, when it was discovered that the pelvis was fractured in three places—viz., the symphysis pubis and the right and left body and descending rami of the pubes. The triangular fragment on the right side was found pushed backwards and downwards into a rent in the bladder wall as large as an egg. The silver catheter could be felt lying against the bare bone of the pubic arch, the soft parts of the neck of the bladder being destroyed. The right triangular fragment was easily removed through the wound and carefully examined. The fracture through the body of the pubes ran right through the obturator notch, so that in all probability it was the obturator artery which was ruptured and caused the hæmorrhage, and not the internal pudic, the more so that the fracture of the descending ramus ran in a slanting direction through it, coming out at the arch of the pubes, and leaving the lower or perineal border attached to the ischium.

Remarks by Mr. TRINDER.—The points of interest in this case seem to be that the patient should with such a severe injury (1) show so little sign of shock, (2) live seventeen days, (3) have his bladder ruptured in an empty condition, and (4) bear carrying from one room to another without pain or hæmorrhage. A median or right lateral cystotomy (which was several times proposed and postponed) would have allowed freer drainage and cleansing, but at the same time would have tended to increase the hæmorrhage by removing the beneficial pressure exercised, in all probability, on the ruptured vessel by the large body of clot which was known to be present. The operation could not have enabled us to control the hæmorrhage effectually.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Hypertrophy of Bladder.—Lipoma of Heart.—Spontaneous Disintegration of Vesical Calculi.—Infantile Palsy.

AT the ordinary meeting of this Society held on Tuesday last, Sir James Paget, F.R.S., President, delivered his presidential address on taking the chair. This will be found *in extenso* at page 159. The meeting was a very large one. Sir Joseph Lister proposed, and Dr. Samuel Wilks seconded, the vote of thanks for the address.

Mr. E. HURRY FENWICK showed a frozen section of a Hypertrophied Bladder, removed from a patient suffering from stricture of the urethra, who died of intercurrent disease. The specimen demonstrated the greater thickness of the anterior wall as compared with the posterior. In this case the anterior wall was twice the thickness of the posterior. He believed this condition, which obtained in hypertrophied bladders, had been overlooked, and the reason for its want of recognition was due to wasting of the muscular wall after the stricture had been relieved, and cases of unrelieved stricture were rarely found on the post-mortem table. He adduced anatomical proofs to support the theory that it is the anterior wall which possesses the greater power of hypertrophying, and he submitted that the comparatively greater strength, elasticity, and resistance to pressure of the anterior wall was one of the reasons for its acknowledged greater immunity in ruptures of the urinary bladder.—Sir JAMES PAGET said that, so far as he knew, the communication supplied a new fact.—Mr. JAMES BLACK suggested that the anterior wall became hypertrophied because it offered more resistance to muscular contraction than the posterior.

Dr. HANDFORD showed a specimen of Fatty Tumour of the Heart, and said there was no satisfactory example of a true lipoma of the heart in any of the nineteen principal museums in the kingdom. There are, however, three doubtful specimens, two of which are probably examples of fatty overloading, and the third is classed among "tumours of uncertain origin." They are in the museums of the College of Surgeons of England, St. Bartholomew's Hospital, and Queen's College, Birmingham. So far as he could ascertain no such specimen has been shown at the Pathological Society of London. The recorded cases only number three, one of which (Gernet's) is doubtful. The three cases are: 1. By Albers, in Virchow's *Archiv*, Bd. 10, p. 215. (1856.) 2. By Gernet, in Virchow's *Archiv*, Bd. 42, p. 534. (1867.) 3. By Banti, in *Lo Sperimentali*, tom. lviii. (Sept. 1886.) He was indebted to Mr. Evan Powell, medical superintendent of the Nottingham Borough Asylum, for the specimen, as also for the notes of the case and of the necropsy. Unfortunately, only the tumour and the inter-auricular septum in which it was embedded have been preserved. The patient was a woman aged seventy-six, who died during sleep. At the necropsy there was found a fair, but not excessive, amount of subcutaneous fat. There was no fatty tumour or excess of fat anywhere, except around the heart, which weighed 14 oz. The muscular substance of the heart was very pale, and of a yellowish colour; it felt greasy and looked streaky to the naked eye. In the inter-auricular septum was a hard round substance about the size of a small pigeon's egg. It was distinctly limited, but had no definite capsule. When cut it had all the appearance of an ordinary fatty tumour. The liver was fatty, but the other organs were apparently healthy. There could be no doubt of the distinctness of the growth, or of its fatty nature. From the appearance of the tumour, from its position in the septum between the auricles, and from the observations of Mr. Power at the necropsy, he entertained no doubt that it was not an instance of the burrowing inwards of the subpericardial fat. A microscopic examination showed that the tumour consists of fat cells with a few degenerating muscular fibres scattered here and there. The probable origin of the tumour was in the inter-muscular connective tissue.

Dr. W. ORD showed fragments of Vesical Calculus, which had resulted from spontaneous disintegration, and had been passed the last few months by a gentleman, aged seventy-five, who for six years had had sugar in varying quantity in his urine, and albumen also. Free uric acid in large crystals were also passed. Six months ago the left femoral artery became blocked, and sloughing of the skin of

the left leg was observed. And three months ago he began to pass calculous fragments without pain and with but little bleeding. A soft catheter had to be introduced as much for enlargement of prostate as for calculous obstruction. The detached fragments evidently came from an ovoid calculus one inch in length. Some fragments had rounded margins, having been chipped off some time before being ejected. Dr. Ord had shown five specimens of spontaneous disintegration of calculi, so it was doubtful whether this process was of rare occurrence. There were two ways in which disintegration could occur: either from within or from without, as in the present specimen. The chemical composition was uric acid and urate of ammonia, and the parts were probably not originally firmly put together; the remarkable alterations in specific gravity of urine might be compared in their effects to alternations of comparative drying and moistening. This was the best explanation he could offer.—Sir JAMES PAGET had seen similar specimens.

Dr. SEYMOUR SHARKEY read a paper on Infantile Palsy, dealing chiefly with the final stage. The specimens were removed from an old man aged sixty, who died of epithelioma of the œsophagus. The legs had been paralysed for fifty-eight years. All the muscles of both legs were represented by masses of fat showing numerous pinkish streaks running longitudinally. The lumbar part of the spinal cord was much wasted. The microscope showed innumerable corpora amylacea. The large nerve cells were reduced in size and number; there were a great many nuclei, and the groundwork of the anterior horns had a finely fibrillar texture. The walls of the vessels had a hyaline appearance, with abnormally large perivascular spaces. All the white columns were shrunken, but the antero-lateral strands seemed to have undergone greater diminution than the others. The larger nerves, shown in transverse sections, presented a great number of healthy nerves intermixed with islands of atrophied axis cylinders surrounded by the sheath. The muscles consisted chiefly of fat, but here and there a few perfectly healthy fibres, well striated, were seen. Other sections were shown from an earlier stage of infantile palsy; in some of these there were to be seen parallel wavy rows of sarcolemma nuclei.—Dr. SAMUEL WILKS said that the case corroborated the views he had always held.—Mr. W. ADAMS spoke of the value of the communication.—In reply to Mr. R. W. PARKER, Dr. SHARKEY said there were no obvious secondary changes in the cortical motor centres.

The following card specimens were exhibited:—Dr. Handford: Œsophageal Malformations, Fistulæ, and Carcinoma. Dr. Sharkey: Syphilitic Arteritis. Dr. H. Maudsley: Ulceration of Trachea, with Perforation of Aorta. Dr. B. O'Connor: Mediastinal Tumour. Mr. F. Treves: Melanotic Sarcoma.

CLINICAL SOCIETY OF LONDON.

Athetosis and Aphasia in a Child—Treatment of Cysts of Thyroid.—Treatment of Imperforate Anus.

THE annual general meeting of this Society was held on the 14th inst., Mr. Thomas Bryant, F.R.C.S., president, in the chair. The list of officers for the ensuing year is appended to this report. The scrutineers of the ballot were Dr. S. Phillips and Mr. G. R. Turner. The votes of thanks to the retiring president (Mr. Bryant) and surgical secretary (Mr. R. J. Godlee) were warmly accorded. Mr. Christopher Heath, the treasurer, read the report of the finances of the Society.

Dr. SAMUEL WEST read notes of a case of Right-sided Hemiplegia with Aphasia, occurring in a female child. The hemiplegia came on suddenly during a paroxysm of whooping-cough. Slight rigidity developed in the weakened limbs, which had recovered some power, but of late athetosis as described by Dr. Gowers had developed. Hæmorrhage was the probable cause of the hemiplegia, but the locality of the lesion could only be surmised.—Dr. RADCLIFFE CROCKER related the case of a girl, aged ten, in whom there was a condition of athetosis and spasm of the right hand. There was a history of right-sided fits, three in number, and lasting over twelve hours. Hemiplegia followed, and about six weeks later the athetosis developed. The child had mitral disease, and the hemiplegia was probably of embolic origin.—Dr. BROADBENT thought that the fact that athetosis had been associated with lesions about the great ganglia should not outweigh certain considerations pointing to a cortical lesion. The remarkable difference in the limbs at rest during sleep and during waking without permanent contractures seemed to point to functional activity of the cerebral cortex. If paralysis had had more the type of a monoplegia, the cortical origin would be still more probable.—Dr. S. WEST had preferred not to suggest the pathology, but thought that the seat of the lesion would rather be in the internal capsule than cortex, considering the sudden onset of hemiplegia and subsequent spasm.

Mr. MAYO ROBSON (Leeds) read a paper on a Method of Treating Thyroid Cysts, in which he advocated antiseptic incision and stitching the edge of the cyst to the skin, draining for a short time under an antiseptic dressing, and then packing with zinc lotion and lint. He read notes of two cases thus treated, the first in a young woman, aged twenty-two, who had a cyst the size of a Tangerine orange over the trachea, which occasionally produced dyspnœa; the second in a woman, aged twenty-four, in whom the right lobe of the thyroid was forming one large cyst. In both the above treatment was perfectly successful, and produced no constitutional or local disturbance. When seen some time afterwards there was very little trace of scar, and no tumour in either case. He quoted from several standard surgical works to prove that the usual operations for thyroid cysts, such as injection, seton, &c., are either dangerous or unsatisfactory, and thought that the advantages of this method were its simplicity, safety, and certainty.—Mr. CHRISTOPHER HEATH said that the contributor had said nothing about hæmorrhage, which he knew from personal experience could be pretty severe from the interior of the sac. He did not know the reason for this; but the injection of perchloride of iron and plugging with strips of lint soaked in the perchloride succeeded very well in arresting the hæmorrhage. Perhaps in Mr. Robson's cases the cysts were so small that no hæmorrhage occurred.—Mr. GANT said that under no circumstances would he interfere with the interior of the cyst. Tearing or scraping of the same should be considered dangerous.—Dr. S. MACKENZIE had examined many microscopical preparations of these cysts, and the thin-walled vessels were remarkably numerous. Doubtless this anatomical fact accounted for the hæmorrhage, and perhaps for the beneficial effect of the perchloride, as testified by Mr. C. Heath. Iron was better than iodine to stanch bleeding.—Mr. H. H. CLUTTON corroborated Mr. Heath's remarks as to the liability to abundant hæmorrhage. He never thought it necessary to suture the skin to the cyst wall. In some cases of plugging the opened cyst high fever developed; the use of iodoform gauze obviated this tendency. The suture to the skin had an objection, in that it might cause the sinus to remain open, as in one case which continued three years. He would prefer complete excision of the cyst to scraping its walls.—Mr. T. BRYANT supposed that Mr. Robson did not claim that free incision was a new treatment, but that stitching the capsule of a cyst to the skin was. If this were not adequately done, septic matters might escape into the subcutaneous tissues. The fear of hæmorrhage would be an argument in favour of laying the cyst open, and making a sinus. In a case of puncture of a cyst, free incision and plugging were required to control the bleeding. In another case, in which Mr. Bryant injected a mixture of tincture of iodine, iron, and alcohol four times without untoward results, the fifth injection was followed by the development of a tumour that pulsated like an aneurysm. Fortunately, however, the application of an ice-bag reduced the swelling without further trouble; but a large artery had probably been tapped. With regard to Mr. Robson's operation, he considered that scraping the interior of such cysts was a bold form of practice.—Mr. MAYO ROBSON advised the suture to the skin as shutting off all the surrounding cellular tissue and preventing inflammatory extension. He would not practise complete excision again; in one case asphyxia, and in another hæmorrhage caused great anxiety. Further, the surgeon could not know how much of the gland would have to be removed, and in view of the functions of the thyroid, as expounded by Horsley, its removal was not advisable. He practised sufficient scraping to separate all colloid material, but not to extend deeply into the wall of the cyst.

Mr. MAYO ROBSON also read a paper on a Suggested Method of Operating on a Uniform Principle in the Treatment of Imperforate Anus, with example, and gave extracts from several authors to prove that the recognised treatment

of cases where the bowel is not soon reached is to perform either Littré's operation or colotomy, although the mortality of the operation, judging by published statistics, is extremely heavy—e.g., M. Guersant having operated in this manner twelve times without saving a patient. He advocated an incision from the central point of the perineum to the coccyx, and then a careful dissection, until either the bowel is reached or the peritoneum is opened, when the upper end of the rectum or the sigmoid flexure of the colon can be brought down and sutured to the skin in the anal region. He described a case in a child one day old, on whom, in March, 1866, he had performed this operation with a very good result, the child recovering without a bad symptom, either local or general, and when seen last the infant had what appeared to be a normal anus, through which a motion was passed about once a day. He considered the operation ought not to be very difficult if a catheter were introduced into the bladder and a good horizontal light were available; that it should not be very dangerous either from shock, peritonitis, inflammation, or hæmorrhage; and that the result, if successful, was infinitely preferable to that of Littré or a colotomy.—Mr. R. J. GODLEE related a case of imperforate anus which seemed to show that the meconium was by no means so irritating to the peritoneum as ordinary fæces were. The trocar in this case, it was found, had passed through the peritoneal cavity before puncturing the rectal cul-de-sac. Colotomy was successfully performed. The child died some time later from disease unconnected with the surgical operations.—Mr. HARRISON CRIPPS remarked that he had listened with much interest to Mr. Robson's paper, for he himself had collected and published in the St. Bartholomew's Hospital Reports the results of operation in over a hundred cases of imperforate anus. With regard to the statement quoted by Mr. Robson, on the authority of a foreign author, that there was only one case on record of recovery after Littré's operation for imperforate anus, the statement was entirely erroneous, Mr. Cripps mentioning that in his own paper five cases of recovery were described. He remarked that there were two chief varieties of imperforate bowel—the one in which there was no sign of an anus, the skin stretching unbroken from the perineum to the coccyx; the other in which the anus existed, but terminated in the cul-de-sac. In the former the rectum was generally near the skin, and much more likely to be found than in the latter class of cases. By making the dissection well backwards, and even, if necessary, following Verneuil's practice of resecting the coccyx, the bowel could generally be found and opened without cutting through the peritoneum. Mr. Cripps considered the dragging down of the rectum and stitching it to the skin a great mistake, for it hardly ever united, while the pus and discharge became pent up behind the stitches, and then set up the cellulitis and peritonitis which were the chief causes of death in these cases.

The following living specimens were shown:—Dr. Radcliffe Crocker: Athetosis after Hemiplegia in a Child. Dr. Stephen Mackenzie: A case of Chyluria with Filariæ Sanguinis. Dr. Angel Money: Hemiplegia with Spasm in a Syphilitic Idiot.

The following is a list of officers for the ensuing year:—President: W. H. Broadbent, M.D. Vice-Presidents: Sir Dyce Duckworth, J. Hughlings Jackson, Samuel Wilks, Sydney Jones, Howard Marsh, and Sir Henry Thompson. Treasurer: Christopher Heath. Council: R. E. Carrington, S. Coupland, F. G. D. Drewitt, J. K. Fowler, W. B. Hadden, F. de Havilland Hall, Felix Semon, F. C. Turner, W. J. Tyson, S. West, H. H. Clutton, W. H. Cripps, H. T. Butlin, A. Pearce Gould, R. J. Godlee, C. H. Golding-Bird, W. A. Meredith, W. Rivington, and John Wood, F.R.S. Honorary Secretaries: Stephen Mackenzie and R. W. Parker.

HARVEIAN SOCIETY.

A MEETING of this Society was held on Thursday, Jan. 6th, Dr. J. Hughlings Jackson, F.R.S., President, in the chair.

The Analogy between Croup and Asthma.—Dr. MORTON read a paper on this subject, the object of which was to compare stridulous laryngitis—to which he gave reasons for thinking the name of croup should be confined—and "spasmodic" asthma, with a view to their mutual elucidation. He called attention to the resemblance in the sudden nocturnal invasion; the diurnal remissions and recurrences for two, three, or more nights; the liability to repeated attacks; the greater prevalence in the male sex; the dry, early, and moist later stages; the cessation of the liability to croup, as well as to asthma, beginning at about six years of age; the frequent origin of both in slight catarrhal or peptic disorder; the common occurrence of both in summer as well as winter. All these peculiarities showed that croup could not be a real laryngitis with paralysis according to the commonly accepted pathology, but a paroxysmal dyspnœa from disturbed innervation of the larynx, as asthma was of the bronchi. This left it open whether the disturbance was motor or trophic. Sir Andrew Clark's hypothesis of fugitive quasi-erectile swellings of the mucous membrane afforded as complete and adequate an explanation of croup as it did of asthma. It was further suggested for inquiry whether hay fever, croup, and asthma might not be different expressions of the same state forming really one and the same disease.—Dr. CHARLES WEST observed that children who had been the subjects of croup or stridulous laryngitis in their earlier years were more prone to suffer from true asthma in later life. The child asthma, as a rule, ceased almost entirely before puberty, and this point should be especially borne in mind by practitioners, since it was possible that the rule might not hold good in cases where the general health of the child was not carefully maintained. Croup was essentially spasmodic in its nature, but was frequently caused by sudden variations of temperature, by attacks of slight catarrh, and by errors in diet. In croup the phenomena were those of spasm and something else; in laryngismus stridulus the spasm was the principal feature, a distinctive difference being formed by the catarrhal signs in the former. He thought that for the present it would be advisable to retain the term "stridulous laryngitis" as he could not altogether renounce the view that some form of congestion or inflammation of the larynx was generally associated with it.—Dr. GOODHART referred to the replacement of croup and stridulous laryngitis by asthma in later life, and inquired whether any corresponding replacement occurred in the case of child asthma after its subsidence at the period of puberty.—Dr. HUGHLINGS JACKSON, after remarking on the great value of Dr. Morton's paper, spoke of laryngismus stridulus and also of convulsions in cases of spasmodic laryngitis. He believed that these fits, and probably those occurring in pneumonia and other acute diseases of children, were owing to discharges beginning in parts of the medulla oblongata or pons Varolii; in other words, they were dependent on discharges beginning in parts on the lowest level of evolution, which was pretty much the "true spinal system" of Marshall Hall. He thought it a matter of great importance to note the mode of onset, the march of the convulsions, in these cases, as carefully as most people now do in cases of epileptiform seizures originating from the middle level of evolution (the so-called motor regions), and as we ought to do in cases of epilepsy proper, dependent, as Dr. Jackson believes, upon discharges from the highest level of evolution. Bearing in mind Victor Horsley's researches, we should, among other things, carefully note the nature, tonic or clonic, of the spasm in the different regions convulsed in the convulsions of children. He stated again a hypothesis he had put forward regarding the convulsions of laryngismus stridulus.[1] He thought they were owing to discharges beginning in the respiratory centres determined by supervenosity of the blood by an excess of their natural stimulus. That convulsions could be produced in some lower animals by inducing supervenosity and by rapid bleeding was well known; in these cases the convulsion is respiratory, and is probably owing to absence of oxygen. According to Kussmaul and Tenner, convulsions in rabbits are produced by rapid bleeding when the cerebrum proper is taken away. Laryngismus stridulus occurs in children at an age when the respiratory apparatus is imperfectly developed, and most often in those who, from rickets, have soft ribs; moreover, the attacks usually come on during sleep, when respiration is less active; these are conditions favouring supervenosity. The good effects of fresh air, country air, and cold sponging are in favour of this hypothesis; moreover, some authorities highly praise musk and belladonna, which drugs are respiratory stimulants; spasmodic asthma in the child and adult was, he supposed, a respiratory convulsion owing to the discharge of imperfect (? small) respiratory centres from supervenosity.—Dr. WEST added that both asthma and croup appeared to affect males more fre-

[1] Brain, April, 1886.

quently than females, while in other nervous affections, such as chorea, the frequency was exactly reversed. He did not recollect any instance of neurosis in after-life succeeding to child asthma. Nor could he remember any case in which general convulsions occurred during stridulous laryngitis. In laryngismus stridulus the convulsive movements were almost always confined to the limbs.

Suppurative Peritonitis.—Dr. GOODHART read a paper on this subject, of which the following is an abstract. The author related several cases illustrative of the resemblance of the symptoms of suppurative peritonitis to those of intestinal obstruction, in each of which, however, there had been subsequent diarrhœa. A remarkable feature of these cases was the absence of high temperature, and much stress was laid upon the uncertainty of this symptom, as in a considerable proportion of such cases the temperature was not raised at all. The degree and position of pain were also shown to be indefinite in their indications. Diarrhœa, in the presence of other symptoms of peritonitis, must be regarded as a most serious symptom; the bowel in ordinary peritonitis was more or less paralysed, and constipation resulted as a very general rule, but this rule did not hold good for the suppurative form of the disease. The fact that peritonitis, and especially suppurative peritonitis, frequently spread to the pleura by direct extension was insisted upon, and the necessity for closer observation of this point was maintained, apart from the ordinary treatment of peritonitis by opium, belladonna, and the administration of food by nutrient enemata or suppositories. No positive rules of treatment could be laid down. Surgical interference in some cases might save life, but its use could only be determined by close study of the particulars of each individual case; the cases, however, most generally suitable for such interference are those in which the disease shows a tendency to localise itself, or, at any rate, has given some indication of having originated in an accessible situation.—Dr. WALTER PEARSE mentioned a case in which, after resection of the knee, excessive vomiting with diarrhœa, but no rise of temperature, had supervened with fatal result. Suppurative peritonitis had been diagnosed, but none was discovered after death. Enormous dilatation of the stomach was the only abnormal condition.

Cancer and its Treatment.—Dr. BLENKINSOP made a passing reference to the pathology and causation of cancer, and then dealt with the purely medical aspect of the question, both in regard to internal forms of the disease and its general constitutional treatment. He leaned to the belief of a cancerous diathesis, and argued in favour of preventive measures in suspected constitutions. He thought that effort should be made to test the value of all remedies which presented a reasonable prospect of success, and related details of four cases in which lime salts appeared to have had a beneficial effect. He assumed that the deposit of lime salts in the vessels gave rise to atheromatous and calcareous degeneration, and so lessened the supply of blood to the cancerous tissues. Cretaceous preparations derived from the animal kingdom—e.g., from oyster-shells—appeared to derange the stomach less, and to be more readily absorbed.

OBSTETRICAL SOCIETY OF LONDON.

A MEETING of this Society was held on Jan. 12th, Dr. J. B. Potter, President, in the chair.

Dr. AMAND ROUTH showed a Uterus, with what appeared to be a fibro-myoma attached to the left cornu of a "uterus bicornuate." Early in 1885 there was a history of extra-uterine fœtation.—Dr. W. GRIFFITH and Mr. DORAN remarked on the case, and the specimen was referred to a committee for report.

Midwifery among the Burmese.—Dr. T. F. PEDLEY of Rangoon read a paper which described the occupation, dress, and physique of Burman women. The knowledge of the native doctors is handed down by tradition, and takes origin from fable, horology, astrology, &c, and dieting is followed according to a certain letter, date, name, good or evil spirit. The midwives are of the poorest and lowest class, their chief qualification being age and being the mothers of large families. The more decrepit, the more they are respected. All new methods are resisted. Nature is kind as a rule to the mother, and carries her safely through. In lower Burmah there is little real poverty, and the women lay by for the event from 5 to 50 rupees. A large store of firewood is laid in. If she cannot buy it, she collects it before her delivery. A room is set apart, where the mother remains till convalescent. Regardless of all sanitary laws, every effort is made to keep out air, and especially the smell of cooking, which is supposed to be particularly injurious. A fire is made of wood, no chimney being provided, and the smoke renders the air stifling. The patient, when in labour, is surrounded by female friends, and a crowd of men and women squat behind the curtain which divides the apartment, and smoke or chew betel. When the pains become severe the patient squats on the floor, supported by a woman sitting behind her. The midwife assists in front by pushing with her hands on the abdomen, using more and more violence as the pains increase. A silk scarf or cloth is tied tightly round the body above the umbilicus, which is drawn tighter as the case proceeds, not with any idea of restraining hæmorrhage or supporting the uterus, but to prevent its rising into the chest. As the head progresses the woman is laid on her back on the floor with her knees drawn up. Her attendants press on the abdomen with all their might. When the head of the child presses on the perineum the midwife leaves the pushing to others, and in all first cases tears the perineum, either with her thumb-nail, which is grown sharp and long for the purpose, or with her great toe-nail. In other cases the perineum is retracted, and, as soon as the head is born, the child is rapidly extracted. If the placenta does not follow quickly the cord is dragged on, and this failing, it is removed by the hand or torn away piece by piece. The mother is washed, and the whole body rubbed with turmeric, and saffron is plastered over the vulva. The fire is kept up, and hot bricks wrapped in rags, or bags of hot sand, are placed on the abdomen, and twice a day the patient has to squat over smouldering embers upon which tumeric has been thrown, or over steam arising from hot bricks. The skin is often blistered by the application of heat, but heat is supposed to permeate the parts and heal them. The food is hot water, hot broth, with fish and rice. The poor get upon the fourth or fifth day, but the better classes scarcely move for a fortnight, except for the daily steaming process and the calls of nature. On the seventh day a hot "pack" is used for some hours, which produces free perspiration. When the blankets are removed the patient is bathed freely in cold water. The constant sweating during the first week brings out a miliary rash, which is considered a good sign. Shampooing or massage is used for hours together, often so excessive over the abdomen that displacements of the uterus are produced. Though Burman women are clean when in health, washing is avoided during sickness, and their habits are dirty. When delivery is not rapid, various barbarous methods are followed, such as standing on the patient's abdomen and pressing or kneading it with the feet, or a bamboo or plank is placed across the abdomen, while the attendants endeavour to expel the child by using all their force at the two ends. This method is very usually fatal to mother and child, and often causes rupture of the liver or bladder. Cases of tetanus often follow lacerations of the perineum, cervix, or rectum; one case of recovery was recorded under the use of chloral. In cross births the part presented is torn or cut off, and the child removed piece by piece, the head being extracted by means of a large fish-hook. In all cases the object is to remove the child as quickly as possible and regardless of risk to the mother, owing to the superstition that if a woman dies undelivered the spirit of the mother and child haunt and bring misfortune to the relatives ever after. Burman women really need little assistance if nature is left to herself. Their pelves are roomy and expulsive efforts strong. The native system leaves little for perverted ingenuity to devise towards preventing recovery, and is about the most severe and fatal in the world. The only remedy is a supply of properly trained Burmese midwives, which the Burman branch of the "Countess of Dufferin's Fund" has determined to undertake. The paper was illustrated with coloured drawings by native artists of the most characteristic points mentioned.—Dr. BOXALL mentioned many points of similarity between the Burmese and Chinese as regards sophistry and superstition in the practice of all the branches of medicine, and the description of the practice of Dr. Hua during the Han Dynasty about a thousand years ago taken from the "Story of the three States" puts modern abdominal surgery back several hundreds of years.—Mr. DORAN asked Dr. Boxall if he knew whether women in the East suffered from disorders incidental to menstruation and pregnancy in consequence of the habit of

tobacco-smoking, to which it is said they are addicted from an early age?—Dr. BOXALL was not aware of any.—Dr. W. GRIFFITH thought the paper of great interest as a record of most barbarous midwifery in the nineteenth century, which would be still more interesting at some future time. There was a field open for gentlemen who had the opportunity of studying midwifery amongst various races to investigate the modifications of the process due to different conditions present which are peculiar and normal to these races. Sir W. Turner and others are investigating their crania and pelvis, and have shown such differences in them as to indicate the probability that the mechanism of labour, including the position of the head at the brim, must be altered accordingly.

On Stricture of the Female Urethra, by Dr. HERMAN.—The author had measured the female urethra in fifty-five cases in which no urinary trouble was complained of. He found that in the majority No. 17 catheter would pass, and in all but two No. 14. He related six cases of stricture of the female urethra under his own care. He had collected and arranged in tabular form twenty-three others, which were all that he had been able to find reported. He drew a parallel between the two sexes as to the etiology of urethral stricture, and showed that while it was much commoner in males, its causes were much the same in the two sexes. In both it might be the result of injury (these cases being proportionately commoner in females on account of child-bearing), or of the cicatrisation of chancres. In the female it was sometimes due to growths of so-called lupus of the vulva. In both sexes the chief cause in young and middle-aged subjects was gonorrhœa. In the aged of the male sex enlargement of the prostate was the common form of stricture. In old women there was found stricture due to general fibrous thickening and induration of the urethra, occurring without any history of gonorrhœa or other discoverable local cause. The author suggested that, as in women the homologue of the prostate gland was the urethro-vaginal cellular tissue, these cases were possibly analogous to enlarged prostate in the male. As to treatment, he found that rapid dilatation was so simple and successful that it was preferable to any other method.—Dr. HORROCKS related two cases under his own care, both of which he considered were congenital. He approved of the treatment by dilatation.—Dr. AUST LAWRENCE (Clifton) considered stricture of the female urethra rare. He had only met with two cases in the last fifteen years. One was in an old woman, and appeared to be due to cicatricial bands; the other was in a young woman, probably the result of specific urethritis. Both were cured by dilatation.—Dr. AMAND ROUTH mentioned a case of inflammatory urethritis which appeared to have commenced with anterior parametritis and spread downwards along the cellular tissues of the vagina, a double urethral stricture eventually resulting.—Dr. W. GRIFFITH had that day seen a case at the Samaritan Hospital in a married multipara aged thirty. She had probably suffered from gonorrhœa. The stricture was an inch and a quarter from the meatus, and only just admitted a uterine probe. It was dilated in a few minutes with bougies to No. 13.—Dr. GALABIN related a case, and Dr. HERMAN replied.

ACADEMY OF MEDICINE IN IRELAND.

Parasitic Disease of Lungs of Sheep.—Stricture of the Œsophagus.—Adenoma from the Mammary Gland of a Rat.—Simultaneous Fracture of both Clavicles.—Cerebral Meningitis and Abscess.

A MEETING of the Pathological Section was held on Dec. 3rd, 1886.

Dr. HENRY BEWLEY said that in the lungs of several sheep which were examined lately in the Physiological Laboratory of Trinity College, Dublin, a number of whitish or greyish nodules were found scattered through them, varying in size from $\frac{1}{16}$in. to $\frac{1}{2}$in. in diameter. On microscopic examination these nodules proved to be caused by a small nematode worm, from 15 mm. to 17 mm. long, and extremely slender. The worm lay coiled up in the interior of a mass of apparently dried purulent matter. This mass was surrounded by a zone of elongated epithelioid cells, arranged in a radiating manner round the central mass. The epithelioid cells were embedded in a delicate fibrous reticulum; and here and there large giant cells were seen. Around these radiating cells was a zone of small lymphoid cells, embedded in fibrous tissue, and arranged in concentric layers. Outside these cells, in some of the specimens, was healthy lung tissue. In others the nodules were surrounded by catarrhal pneumonia. The worms in these nodules have no reproductive organs, and are apparently immature forms of strongylus filaria—a nematode worm that inhabits the bronchi and trachea of sheep and goats. Leuckart ("Die menschlichen Parasiten," 1867, Bd. ii., p. 107) and Baillet, in a Dictionary of Veterinary Medicine, mention the existence of nodules in the lungs of sheep similar to those in the cases described above, caused by the embryos of strongylus filaria; but they give no account of the histological changes in the lung produced by these parasites.—Dr. MACSWINEY asked if Dr. Bewley looked for this parasite in any other part of the tissue of the sheep. It would be interesting to know whether its habitat was confined to the pulmonary organs, or the parasite was ubiquitous.—Dr. BEWLEY, in reply, said he did not examine any other part of the sheep's body for parasites. He would have liked to examine its trachea, and he hoped to be able to do so at some future time.

Mr. EDGAR FLINN exhibited the Œsophagus and Stomach of a man who died in St. Michael's Hospital, Kingstown, from stricture of the œsophagus, due to malignant disease. The history of the stricture dated back four years, the act of deglutition becoming more and more difficult during the last three months of the patient's life. The stricture became very much contracted during the last three weeks of his existence—so much so that he became unable even to swallow fluid, and had to be fed by nutrient enemata. A post-mortem examination was made, and it was found that the left lung was very much atrophied and collapsed. The walls of the œsophagus were greatly thickened and surrounded by a hardened mass matted together, which implicated the neighbouring structures. The œsophagus was very much narrowed at its lower fourth, and the most contracted part of the stricture was found to be about three-quarters of an inch from the cardiac orifice of the stomach, and would hardly admit of a small-sized penhandle being passed through it. The stomach was enormously dilated, so much so that when the abdomen was opened it appeared to fill up the entire cavity, and was full of a brownish fluid, very offensive in odour. A large fruit-stone was found immediately contiguous, and somewhat beneath the pyloric orifice, embedded in a diverticulum. This fruit-stone must have lain in this diverticulum for a long time, the post-mortem appearances showing that its passage through the œsophagus would have been well-nigh impossible during the last two years of the patient's life; from its position near the pylorus, it exercised a considerable deal of pressure on the pyloric orifice, and thus, in great measure, the great dilatation of the stomach was to be accounted for. The liver was likewise very much enlarged. Dr. M'Kee, the curator of the Royal College of Surgeons in Ireland, had made a microscopic examination of the parts, and had reported that the disease implicating the œsophagus was epithelioma.—Mr. DOYLE asked if the patient showed any symptoms of old pleuritis.—Dr. BALL said one of the most interesting features in the case was the presence of the diverticulum in the pylorus. True diverticula were exceedingly rare. Mr. Moore, one or two years ago, brought before the Pathological Society of London a case of several true diverticula in the neighbourhood of the pylorus; and he suggested that they might be analogues of the multiple diverticula which were present in fishes.—Dr. PURSER said the most interesting point in the case was the dilatation of the stomach. In stricture of the œsophagus the stomach was usually contracted. There must have been some disease in this patient long before the carcinoma of the œsophagus, which produced the dilatation of the stomach. It appeared to him that the pylorus was extraordinarily small. The stricture of the pylorus must have been either produced by disease or congenital. The pouch in the stomach was, he thought, not an abnormality, but the product of the fruit-stone in its ineffectual efforts to get through the narrow pylorus.—Mr. FLINN, in reply, said he was not aware that the patient had had pleuritis or any affection of the chest at a previous date. He did not think there were any diverticula except the one where the fruit-stone was.

Mr. J. A. SCOTT exhibited a specimen of Adenoma from the Mammary Gland of a Rat. At the Carmichael College of Medicine a number of rats were kept. The animals were in the habit of gnawing through their cages and escaping,

and others had to be got in their places; and the result was that from 100 to 200 rats had passed through their hands during the last two or three years. The rat from which the specimen was taken was brought to him by the porter. It had a big tumour in its abdomen, into which its legs seemed to be drawn up, very much in the way in which a penis sometimes was into a large hydrocele. Nevertheless, the animal had been several times pregnant, and was able to suckle its young. The rat was killed, and on opening it he found the large tumour that was before them. A section of the tumour showed it to be an ordinary adenoma. A part of the specimen showed the ordinary excretory mammary gland, with a quantity of fat; in other parts there was the gland tissue, and elsewhere a large quantity of fibrous tissue. Dr. Scott said he had invariably opened the dead rats, particularly the females, in order to secure the embryos, but he had never before met with a tumour of the mammary gland in any of them. He did meet with an ovarian tumour, and he hoped to bring it before the Section.

Dr. E. H. BENNETT submitted a cast exhibiting Simultaneous Fracture of both Clavicles, taken from a man who was treated in Sir P. Dun's Hospital, and also the clavicles of a little girl, aged six, who had sustained a complete fracture of one clavicle, and an incomplete fracture of the opposite, by being run over by a tram-car. Having detailed the history and mechanism of the injuries, Dr. Bennett directed attention to the fact that in the first case perfect union had been obtained in both fractures, with but little deformity—a fact of importance, seeing that out of eighteen cases collected by Gurlt, no less than eight had resulted in non-union of the fractures, which was clearly attributable to the difficulty of maintaining the parts at rest in such an injury without the most careful nursing. Dr. Bennett exhibited at the same time a series of injuries of the costal cartilages taken from the body of the child who had had the collar-bone broken. On the right side, the second, third, and fourth cartilages were broken transversely, while the first was dislocated from its rib. On the opposite side one of the lower cartilages had also been dislocated from its rib, and one had sustained a partial fracture. Dr. Bennett directed particular attention to the dislocation of the cartilages from the ribs, as the occurrence of such dislocation had been denied by Malgaigne. He also directed special attention to the incomplete fracture of one of the cartilages, not on account of any great practical importance attaching to the injury, but as serving to complete the analogy between these injuries and fractures of bone.—Dr. MACSWINEY asked, Did Malgaigne, in his criticism, or rather dogmatic statement, that dislocation of the cartilage never occurred, refer to adults or children?—Mr. FLINN mentioned that about eight years ago a case came under his notice of a coal-miner in Staffordshire. While engaged in a lying position in what was called "holing," a very large piece of coal fell upon him and fractured both his clavicles—the one at the sternal end and the other at the acromial end. The lower third of his femur was also fractured.—Dr. MACSWINEY: Did the fractures of the clavicle unite?—Mr. FLINN: Yes.—Dr. BENNETT, in reply, said that Malgaigne gave four cases of this fracture at the age of seventeen, which was the earliest age that he recorded. It was an eminently difficult thing to keep it reduced, for, although after the individual had made a full breath the parts would slip into their places, when the chest collapsed they would slip out again.

Dr. QUINLAN exhibited a case of Cerebral Meningitis and Abscess. He said it was taken from the body of a scrofulous, starved-looking young man, aged twenty-three, who was admitted into St. Vincent's Hospital on Nov. 23rd. He had for many months had an offensive purulent discharge from his right ear, and was on admission suffering from the most agonising pain, radiating from the ear to the frontal, parietal, and occipital regions. His pulse and temperature were above normal, but he was quite clear in his mind, and had no convulsions or muscular stiffness. On the morning of Nov. 25th, about 8 30 A.M., he became suddenly stupid and heavy, and the right pupil became dilated and insensible to light, the left pupil remaining normal. He gradually got comatose, and died at 2 P.M. A post-mortem examination was made twenty hours after death by Mr. Coen, the house-surgeon. The dura mater was firmly attached to the upper part of the brain, the general surface of which was rather congested. On removing the brain, a dark discolouration was perceived on the side of the right middle lobe, and on the back part of the cerebellum and on the medulla oblongata a large patch of recent meningitis with subarachnoid effusion. On opening the right ventricle, it was found full of sero-purulent fluid; and on making a section of the right middle lobe, a large abscess, full of offensive pus, was discovered, corresponding to the dark spot already mentioned. The petrous portion of the temporal bone was extensively diseased; and the cause of the sudden coma on the day of death was, no doubt, the bursting of the cerebral abscess into the right ventricle.—Dr. MACSWINEY said the pathological symptoms in the case were those of chronic purulent inflammation of the middle ear. He wished to ask, What was the condition of the temporal bone and the bones of the ear on the side affected? Was the disease obviously extended from inflammation of the middle ear?—The PRESIDENT: Was an examination made of the petrous bone?—Dr. QUINLAN, in reply, said there was an opening into the petrous bone, from which matter was flowing. He probed it and found the bone quite diseased and disorganised, but he did not cut the bone out. There was the same smell from the pus that came out of the ear as from the pus that came out of the abscess.

Reviews and Notices of Books.

The Life of Sir Robert Christison, Bart., M.D., D.C.L. Oxon., LL.D. Edin., Professor of Materia Medica in the University of Edinburgh, Physician to the Queen in Scotland. Edited by his Sons. In two volumes. Vol. II.: Memoirs. Edinburgh and London: William Blackwood and Sons. 1886.

IN the first volume, already noticed, of this remarkable book Sir Robert Christison is allowed to tell the story of his own life. In the second, which is now before us, the story is largely told by others, though free insertion is given to Sir Robert's own letters. There is, of course, some overlapping and some repetition of subjects; but when the length of Sir Robert's life is considered, and the fruitfulness of it in work and honour and influence and example, this is not only forgiven, but becomes a cause of gratitude to the editors. Chapters 7 and 8 in this volume deserve very special notice. The first is written by Professor Gairdner, and treats of Christison as a physician; the second gives an account of his other scientific work. Christison followed Bright powerfully in his researches in renal disease before the true significance of Bright's discoveries were generally accepted, and he gained from Rayer, the greatest of continental authorities, high praise. His accounts of Fevers and Inflammations will remain very valuable parts of medical literature for their vigour and accuracy. True, he did not accept the modern doctrines of fever, and he persisted in believing that inflammation fifty years ago was of a different type and required a different treatment from that of later years. This is only an interesting proof of the fact that there is a conservative element in the most intelligent minds. And who does not know that Sir Robert was a Conservative?—broad enough to vote for his friend Sir Lyon Playfair so long as he thought him a representative of science and learning rather than of mere political *shibboleths*, but capable at eighty of making a political speech of an hour's length against his friend when he thought he had exchanged the academic mind for the political one. But, his conservative views notwithstanding, his account of the fevers which he saw and the six or seven fevers which he passed through—of which most interesting notes are to be found in this volume, one describing eloquently a personal experience of hyperpyrexia (temperature 107°)—are of permanent interest. Professor Fraser's account of what Christison did in dietetics, toxicology, and materia medica, and still more of what was in his mind to do in the matter of therapeutics by studying first the action of medicines in the healthy body, shows that Christison was on the true scent of the recent great advances in the medical art. His investigations into the action of oxalic acid, of Calabar bean, and of digitaline were original.

Christison's knowledge of poisons and his sound common sense made his evidence in all the chief medico-legal cases of his time indispensable. As with Sir Benjamin Brodie in England, the Government sought his opinion on all subjects of medical interest—not only those affecting Scotland and the Scottish Universities, but having wider relations, such as that of vivisection. Of all such subjects, and a hundred more, this volume contains notices that are extremely readable and instructive. For what the volume shows is the many-sidedness and manliness of this Professor, who ruled the University of Edinburgh probably more than any other man for more than half a century, who was absolutely without cant, whom many thought cold and haughty, and yet who was so loved as to be nursed in one of his illnesses, at the age of eighty, by four old pupils, and who was followed to his grave by all that was worthy and reputable in Edinburgh. If the fame he achieved has no charm for some of our readers, perhaps the feats he performed—his rapid ascent of mountains, his walking tours, his captaincy of the Volunteers when over sixty, and his indomitable pluck and hopefulness under illness—may secure their admiration. The study of these volumes, however, cannot but leave the impression of a true leader of men.

Handbook of Diseases of the Ear. By URBAN PRITCHARD, M.D. Edin., F.R.C.S. Eng., Professor of Aural Surgery at King's College, London, Aural Surgeon to King's College Hospital, Senior Surgeon to the Royal Ear Hospital, London: H. K. Lewis. 1886.

THIS manual of Diseases of the Ear, intended "for the use of students and practitioners," commences with a description of the anatomy of the three divisions of the ear, that of the inner ear being especially good. The account of the examination of the ear and the diseases to which it is liable, is given in a short and methodical manner, and, for the most part, is in accordance with what may be found in other text-books on the subject. Some points, however, call for remark.

In making mention of the force-pump (which we believed is now seldom if ever used) as a means of inflation of the middle ear, Dr. Pritchard says that "it requires to be used with the utmost caution, and although it may in certain cases be applied with advantage, there is some risk in doing so"; but the reader is left in doubt as to the selection of these cases. In speaking of an operation for imperforate meatus in cases when some hearing power is present, he recommends the use of a tube to prevent the surfaces uniting, but he does not say whether by this means he has ever succeeded in establishing a lasting meatus. The removal of foreign bodies is carefully considered, and useful cautions, as well as advice, are given. The author regards multiple and rounded exostoses of the meatus as "the result of gouty, or, in some cases, perhaps rheumatic, irritation of the periosteum"; and he is careful to explain why the removal of any exostosis, except to allow a freer outlet for discharge, is rarely advisable, and should never be undertaken lightly.

It is much to be hoped that in another edition of this manual the author will be more definite in his directions in one or two particulars. For instance, in recommending puncture of the membrana tympani in cases of acute inflammation, he says "the operation ought to be performed, if possible, by a practised hand." Surely if this were not possible it were better left unperformed. Again, when suggesting that in cases where an opening into the mastoid process is required the perforator that was figured in Hinton's article in Holmes' Surgery be used, so that it cannot penetrate further than a quarter of an inch, and that if then, by the help of a dentist's elevator and strong steel probe, pus is not reached, he continues, "and there can be little or no advantage in perforating the inner table of the skull, while there must be considerable danger in attempting to do so, for the bone in this position varies much in thickness, and the lateral sinus may be very close." The words "little or no advantage" so applied appear very inadequately to express the results to be expected if the inner table of the skull were perforated. Dr. Pritchard thinks the late Dr. Harvey was correct when he considered that gout and rheumatism affected the middle ear through their action on the joints of the ossicles, and the treatment to be relied upon for this condition is mainly constitutional. The illustrations are well executed and there is a very complete index.

Lehrbuch der Vergleichenden Anatomie der Wirbelthiere. Bearbeitet von Prof. Dr. ROBERT WIEDERSHEIM. Zweite Auflage. Jena: Verlag von Gustav Fischer. 1886.

No better evidence of the excellence of this handbook can be adduced than the fact that the first edition has been rapidly exhausted and that a second edition has been called for. Considerable additions have been made to the old material, especially in regard to palæontological discoveries, the development and morphology of the mammalian skull and of the hard parts of the extremities, the brain and the cerebral nerves, the suprarenal bodies, the cutaneous sense organs, and the thymus and thyroid bodies; and the introductory sections on the development of the urino-genital apparatus have been extended. The account of the respiratory apparatus of birds has received large additions, and the author expresses his obligations to his colleague Dr. Sclater (who is recognised as one of the first authorities) for assistance in this section. In passing, we would call the attention of Prof. Wiedersheim to the indifferent way in which the index has been compiled, for, desiring to read that section, we naturally turned to "Vogel," but that word does not occur. Disappointed in this, we turned to "Respirations organe," and found we were referred to "Athmungs organe," when again no reference to those of birds is made. The word we should have looked for is "Luftwege"; but why not save the time of the reader by giving under the head of "Respirations organe" the reference to those of birds at once, without the annoying proceeding of referring to something else? Surely it would have been easier to have put it after "Respirations organe der Vogel" (p. 735) than "v. Athmungs organe." The bibliography, on the other hand, is drawn up in first-rate style, and occupies sixty pages. The page is larger than in the former edition, and the lines are longer, so that, although the volume is not increased in thickness, it contains considerably more matter. A few additional woodcuts have been introduced.

Our Temperaments: their Study and Teaching. A Popular Outline. By ALEXANDER STEWART, F.R.C.S. Edin. London: Crosby Lockwood and Co. 1887.

THE author very justly draws attention to the importance of temperament throughout life, more especially during the educational period and illness, and to the general neglect of the subject, and the frequent misuse of the word. He makes suggestions for classifying the triple and quadruple combinations of temperaments so common in our mixture of races, the extreme complication of which must often invalidate any sweeping judgments passed on first appearances. From his own observations the author has added the possession of a long neck to the other signs of the nervous, formerly the bilious, temperament. Altogether the book is suggestive, and not less so because, owing to the absence of authorities on the subject, it is rather a collection from every quarter of such materials as have any passing relation to the theory than a treatise of final authority. The volume leaves no luxury of type or paper to be desired, and in addition to other illustrations some thirty faces from Lodge's Historical Collection of Portraits are reproduced as an Appendix.

THE LANCET.

LONDON: SATURDAY, JANUARY 22, 1887.

AT the quarterly meeting of the Council of the Royal College of Surgeons, held on the 13th inst., the result of polling the Fellows on the question of extending the franchise to the Members of the College was duly announced. As will have been seen in our last issue, the Fellows have replied in the *negative* to both the questions put before them—viz., (1) whether Members should be allowed to vote for Fellows as members of the Council? and (2) whether Members should be eligible for seats on the Council? An answer other than negative to these questions was hardly to be expected—could, indeed, hardly have been expected even if the qualification of a certain standing at the College, which is insisted on by the Association of Members acting for the body at large as a *sine qua non*, had been prominently put forward, instead of having been ignored, by the Council when framing the questions. There is, however, much to encourage the Members in the result of the poll, if this be carefully analysed. In the first place, the total number of available Fellows is 987, and not 1140, as recently estimated by a past President of the College—a fact which still further emphasises the impropriety of so small a part of the body corporate having the exclusive management of a scientific College numbering not less than 17,000 Members. Moreover, from the 987 Fellows to whom circulars were posted only 706 answers were received, and of these six gave no decision one way or another; thus the number of Fellows who have voted on this occasion is actually 700. Of the balance, 21 Fellows failed to get their circular, which was accordingly returned to the College through the dead letter office, leaving 260 circulars unanswered. Of these 260 Fellows it may certainly be said that they are *neutral* in their views; it would not be unfair even to claim them as favourable to the views of the Members. Had they been strongly opposed to the proposed changes, they would certainly have voted against them. On this line of argument, if we count the 260 unanswered circulars as favourable, and deduct them from the majority of "noes" to the first question, we convert these "noes" into a solid majority of "ayes"; while the 354 "noes" to the second question would be reduced to 94.

But even as the figures actually stand the majorities of "noes" are decidedly small, and cannot therefore in any sense be considered final or binding. To the first question, as to whether Members shall be allowed to vote, the Fellows have responded in the negative. Allowing these "noes" and "ayes" to equalise themselves as far as they will, we have a majority of only 143 Fellows to deal with. It cannot for a moment be supposed that the constituency of the College, numbering 17,000 educated men, will consider the question settled by such a vote. We cannot but think that under these circumstances the Council of the College of Surgeons should regard themselves as called upon at once to take steps to give effect to the desires of the constituency at large. As regards the second question, whether Members shall be eligible to sit on the Council, there is a larger majority voting "no"—the "noes" to the "ayes" being as three to one. Even this, however, on such a question, is not the overwhelming majority which might have been expected. To ask the Fellows to give up their cherished privilege of alone being eligible to sit on the Council of the College is to test them very severely, and they hesitate to relinquish their present position. It would be most interesting to know something more about the votes. We incline to think that the "noes" will be found chiefly among the older London Fellows, who are either enjoying a seat on the Council or other office at the College, or are looking forward shortly to do so; and among the younger men, recently admitted Fellows, who have little else to rely upon, and would keep themselves, at any cost, as select as possible. Those who regard the Fellowship as an academic distinction, instituted and kept up for the purpose of promoting a high surgical standard among teachers and hospital surgeons, will rely upon something more than mere title, and will seek to distinguish themselves by their attainments, rather than by the mere exercise of a voting franchise which is denied to the majority of their fellow Members.

If we now look at these figures from the standpoint of the "noes," the Council must themselves see how small and unsatisfactory the majorities are. Fellows voting "no" to the first question number only 419—a minority as judged by the number of circulars sent out; Fellows voting "no" to the second question number only 526—that is to say, a majority of 65 as judged by the circulars issued. Finally, the Council must not lose sight of the fact that 260 Fellows have declined to vote at all. Of course we cannot pretend to forecast what will be the action of the Council under these circumstances. They have never before, we believe, appealed to the Fellows at large for assistance in the settlement of an admittedly difficult problem, and we have therefore no precedents to guide us in forming conclusions as to what their action is likely to be at the present juncture. This we may say in all truth, that the Council of a body corporate have rarely had such an admirable opportunity placed in their hands for gracefully putting an end to an unwise and unconstitutional rule by which about sixteen-seventeenths of the entire body are excluded from all participation in its affairs, and for the introduction of a much needed and greatly desired reform, which cannot but consolidate the College, improve the status of its Members, and raise the profession in the esteem of the public.

The Council of the College of Surgeons have, however, consistently opposed all reforms, and will doubtless in this as in other matters only move when some higher authority absolutely compels them to do so. We must refuse to find any sign of concession even in the resolution proposed by Sir SPENCER WELLS, which was only passed by eleven votes to eight, and still requires confirmation at the next Council meeting—viz., "That although the Council are not prepared to give effect to the recommendation contained in the first resolution carried at the meeting of the Fellows and Members held at the College on the 4th of November, 1886, the Council are prepared to act upon the second resolution, so far as to appoint a small committee to confer on the

subjects of the first resolution with representatives appointed by the Association of Fellows and the Association of Members." The terms of this resolution are peculiar. If the Council are *not* prepared to give the Members the privileges they seek, what purpose will a conference with the two Associations serve? This determination on their part might just as well be conveyed in a letter. The questions have been so long, so persistently, and so temperately put before the Council, that a conference on the lines laid down in the above resolution seems unnecessary. In the interests of the Members such a conference is even undesirable, for it simply means delay and procrastination. Meanwhile the Members must notice that the Committee of Charters and Bye-laws are "requested to send a further report as soon as possible in reference to the proposed changes in the Charter and Bye-laws." Members, therefore, should lose no time in making known their grievances. The official analysis of the recent polling of the Fellows should be placed in the hands of an actuary, and its lessons and indications be thoroughly worked out and forwarded to Her Majesty's advisers along with the formal petition now in course of signature. We can only hope that many new signatures have been added during the present year. If the officials of the Association of Members still want others, we would recommend a house-to-house visitation, with a view to expedite matters, and in order that the petition may be presented with the least possible delay.

No practitioner who has had a lengthened experience in any department of the medical profession can question the existence of a class of *difficult patients*. We do not speak of difficult cases, nor are we alluding to difficulty of the sort which arises out of the necessity of adapting drugs and methods of treatment to the idiosyncrasies of constitution and susceptibility. The perplexities caused by this particular need are often more than sufficiently embarrassing; but it is not of these we are now thinking. Changes which are made gradually, whether in the organism or in the habits of life, do not commonly challenge attention, but are not the less, on that account, effective in their consequences. We are apt to forget that a really great change has come over the spirit of the popular dream of the physician and surgeon and their respective arts during the century which is now hastening towards its close; and one of the most notable and potential features of this change has been the complete breaking down of the fence of mystery which once surrounded the practice of medicine, and which, however intangible and groundless in itself, did most certainly confer this mutual advantage on doctor and patient, that while the former gave his advice with an authority, perhaps fictitious or exaggerated, which has now disappeared, the latter rendered more or less unquestioning obedience, and reaped his reward by having both mind and body brought under the sway of the physician who essayed to relieve him. A great deal of very short-sighted nonsense is spoken and written by well-meaning but narrow-minded people on the subject of mental influence. In the realistic honesty of this enlightened age, it is too commonly held to be a measure of truthfulness that the effects of treatment shall be counted only in proportion as they are physically apparent. In a word, they must be material, either as chemical or directly realistic, in some immediately appreciable manner and degree. All else is disregarded or declared to be worthless and useless, because "imaginary." It is forgotten that the brain is not only the organ of the mind, but in a very potent way the centre of the nervous system, and consequently what may be *imaginary* in its inception may so react on the nervous system as to be fully as real as any other agent in producing material changes and effects, productive of good or evil results, as regards first, the function, and, second, the structure of the organism. Physiology compels us to give weight to what may be termed dynamic, as well as to directly chemical powers and processes. Moreover, it teaches us that the one class of phenomena are as real as the other. It is a strangely perverse "materialism" that seeks to exclude the large class of mental, or, in other words, cerebral, influences from the category of forces operating within the area of the organic life. The bearing of this general proposition on the subject immediately before us may be briefly stated thus: It is not less *unscientific* than it is practically inexpedient to treat patients as though they were simply apparatus for the carrying out of chemico-physical processes. It is not with masses of solid and fluid materials we have to deal, but with living beings like ourselves, with moods and tempers, and susceptibilities and caprices, mental as well as bodily, every one of which must count for something in the totality of disease. It is not with bodily maladies only, but also with mental states, we are required to cope in the endeavour to arrest, or limit, or remedy the effects of morbid action.

The most troublesome class of difficult patients is, we are convinced, composed of individuals who are not treated, as it were, personally. The exigencies of a professional life compel the majority of busy practitioners to form a habit of work which does not readily admit of their bestowing sufficient attention on the question of mental idiosyncrasy. The condition rather than the men are to blame for this defect, but it is a fault of clinical method, and we believe a very serious one. Thus there are difficult patients who would cease to be difficult if it were only perceived that their mental, and collaterally their nervous, conformation and habit of life, require that the processes which are to be wrought out in their organisms in the medication of disease, shall be brought directly under the domain of the consciousness. To take a familiar example of this; cases are not uncommonly met with in which a moderate dose of sedative will not produce quietness, still less induce sleep, or even exert a soothing influence on the nervous system, unless the effect which it is desired to cause by the drug is explained. It is easy to turn this into a jest, and to recall that hackneyed story of the bread pill; but such a line of remark is notable only for its stupidity and ignorance. The true explanation of the effect produced is not that "imagination" puts the patient to sleep, but that the fretful state of unrest which prevents natural sleep is quieted by the perfectly physiological process of removing a source of worry about expected wakefulness, and substituting for it an expectancy of sleep. Even if it were that much-abused agent "imagination" which sent the patient to sleep, without any or with only a minimum of some stupefying poison such as bromide or chloral, it would be

better to get the result by simply removing the mental or cerebral obstacles to repose, than by setting up a state of drug-induced stupor. The explanation given to the patient is as much part of the physical process of medication as the administration of an opiate. We merely mention this matter as illustrative of the principle. Precisely the same mental method applies to the relaxation of muscular spasm in the case of a dislocated joint or a troublesome case of fracture, and to the induction of vermicular movement of the intestines in a stubborn case of constipation, and in many other forms of disease. There are patients whose consciousness must be made party, so to say, to the treatment. On the other hand, there are patients who cannot possibly be thus treated, and who must be helped on the way back to health by authority and mystery. To explain processes to patients of this last-mentioned class is to jeopardise success in every respect. In short, the confidence and co-operation of the patient should be secured as aids to cure; and these can only be enlisted on the side of the practitioner by a skilful management of the patient not less than of the disease.

The point on which we are anxious to insist is that *patients* ought to be studied not less than *diseases*, and that, to ensure the largest measure of success in his work, the physician or surgeon needs to be not only versed in the lore of the schools, but to be a man of the world and a close student of men and manners. The class of difficult patients might be more correctly described as a class of persons whom it may be difficult to understand. Difficulty in managing cases generally means difficulty in dealing on the best terms with the individuals who form the subjects of disease. Practitioners too commonly form *habits* of manner and method. We venture to suggest that the medical adviser should approach each patient with an entirely open mind, and study the person as closely and promptly as he studies the disease. The treatment should be adapted equally to the patient and to the disease. Plans of treatment, even particular drugs, may be contra-indicated or rendered specially desirable by the idiosyncrasies of a patient. Difficult patients are nearly always simply misunderstood.

THE occurrence of small-pox on board the North German Lloyd steamer *Preussen*, and the resulting importation of the disease into several of the Australasian provinces, is a matter of grave importance, and it gives interest to the attitude of the Australian Governments towards this disease. The possibility of serious results ensuing from such importation was evidently one of the grounds which led to the assembling at Sydney in New South Wales of the Australasian Sanitary Conference of 1884, when it was unanimously held to be necessary to endeavour to cope with small-pox introductions by means of quarantine; the several adjoining territories which go to make up the mainland and the adjacent islands to be regarded as one state for this purpose, with one Federal Quarantine Act to control the importation of infectious diseases.

The report of that Conference deals in the most candid manner with the quarantine question. It admits that such measure must deal with individuals in an opposite way to that in which the criminal law affects them—that is to say, every person, however free from infection, must be assumed capable of spreading disease until his incapacity to do so has been proved, the period of proof extending at least as long as the period of incubation of the disease. At the same time it is frankly admitted that there is a limit to the period for which a quarantine system will be possible, and it is stated that as the Australasian commerce increases, the possibility of continuing the system will become less and less, and hence that internal sanitation must be proceeded with, because it is such sanitation that is, after all, the true defence of all nations against disease, and the real guarantee of national prosperity. The application of the system as heretofore in force is admittedly accompanied by great hardships. Nothing worthy of the name of quarantine could be done until the terminal port was reached, and then, even if all sickness had ceased on board for even as long as a fortnight, all the passengers and crew were supposed to spend three weeks in seclusion in the quarantine ground, besides restrictions as to the vessel, the cargo, and the process of unlading. These processes, apart from loss to individual passengers, may be estimated in the case of a steam-vessel to cost from £120 to £300 per diem. Without relaxing the stringency of the process, in so far as detention is necessary to prevent importation of small-pox, it was proposed that two quarantine stations should be established, one at King George's Sound for vessels approaching Australasia from the westward, and another at Lizard Point for those coming from the north. The sick and their immediate attendants would be disembarked at once, and, if need be, all passengers would be landed so as to ensure proper disinfection of the vessel. It is also stated that "those persons most likely" to be incubating the disease would also be detained at the first quarantine ground touched at; but what this means it is difficult to say. Indeed, herein lies the main weakness of the system, for although, after the elimination of these sick and suspected ones, whoever the latter may be, the vessel would resume her journey, and the length of that journey would be deducted from the total quarantine detention which would otherwise have become necessary at the port of arrival, yet success would, we imagine, be almost entirely dependent on the complete elimination of persons "apparently well" but who nevertheless had already contracted the infection.

In many cases the process would be facilitated by the vaccination or revaccination, whichever it may be, of all persons on board. Indeed, for all practical purposes a compulsory system of vaccination would be brought to bear upon the passengers and crew. Thus, one of the conclusions of the Conference is to the effect that all persons arriving in an infected ship, and not being themselves affected, "shall be revaccinated," unless they can afford proof of having recently undergone the operation. If the vaccination succeeds, a fifteen days' detention at the quarantine grounds will be required, or its equivalent on board ship; but if any persons refuse to be vaccinated, then the health officer is to have the wide power of detaining them until "he is satisfied of their inability to spread small-pox," and in no case is the detention to be of less duration than twenty-one days. To what extent such a measure could succeed it is impossible to foretell. Its justification appears to lie in the belief that in Australasia the population are not protected by vaccination

When contrasting the system with that obtaining in England, the Conference is under the belief that in this country the performance of vaccination is so efficient that small-pox "very properly is not feared." We wish it were so; but so long as years like 1881 give us 2371 small-pox deaths in London alone, we cannot claim the position which efficient vaccination would afford us. In short, it is not the fact of the existence of a compulsory power to vaccinate every child once in its life, and this as imperfectly as the operator may choose, that leads us to deal with small-pox otherwise than by quarantine; but because, as the Australasian Conference very properly puts it, "quarantine against small-pox is at this date an anachronism." The absence of a system of compulsory vaccination must place Australasia at an immense disadvantage in dealing with small-pox, and hence the Conference demands that vaccination shall be enforced. There, as here, a principal trust must be placed on the enlightenment of the population, and it is possible that only in so far as the quarantine system fails will the Australian people as a whole see the necessity for universal vaccination. How far quarantine protections are likely to postpone adequate national protection by means of vaccination remains to be seen, but the Australian Governments are admittedly in a difficulty with regard to the subject.

In the meantime the *Preussen* affair has led to twenty-two attacks amongst the passengers in quarantine at Melbourne; thirty passengers were landed at Sydney, and, the disease spreading, seventy-one cases resulted; and several attacks are reported at Adelaide. We sincerely trust that the disease will be held in check, and we shall look with interest for a report of the actual proceedings adopted with a view to this, and of the results attained.

THE English language is rich in words descriptive of the operation for the removal of procreative organs, such as to spay, geld, cut, and castrate. One of these words only is, however, applicable to the operation in the female alone. The male appendages have been removed in the young of animals, for economic reasons, from time immemorial, and the operation is then called gelding, castrating, or cutting. They have been removed in the human subject, also, for domestic reasons, and the operation is called "castrating" or "gelding." They have, again, been removed in man for disease, and here also the operation has been called castrating by surgeons at all times—castrating for cancer, sarcoma, &c., as the case may be. Within the last twenty years removal of the uterine appendages has been practised for disease of those organs, for epilepsy, nervous disorders, &c.; and the operation has been called "spaying," Battey's operation, oöphorectomy, removal of the uterine appendages, &c.; but objection has been taken to the word "spaying" in this connexion for more than one reason. It is said that spaying means the removal of the uterine appendages in young animals for economic reasons, and that the removal of these organs for disease is not spaying. If this be the case, it follows that removal of the testicles for disease is not castration, and it must be concluded that all the learned men who have written on surgery have been wrong in their use of the word. In the next place, it is said that a kind of reproach or opprobrium is attached to the word spaying. If this be the case, greater is the reproach attached to castration, for the operation has been practised upon the human subject for the purpose of maiming simply—the making of eunuchs. No analogous use of spaying can be proved. It follows clearly from this that if the present use of the term castration in surgery be correct, it is also correct to designate the operation for removal of the uterine appendages in women as "spaying." These reasons for the use of the word, however, hardly deserve mention but for the objections taken to the word, and mentioned above. The real reasons for the use of the word are two—namely, that it is the only English word for the operation, and that it alone, and no other word or words, conveys to English people the meaning of an operation which has been lately not unfrequently performed. It is true that there are other words by which the operation can be explained to persons conversant with anatomy, physiology, and surgery; but all the women who are subjected to the operation of spaying are not versed in these branches of science, and it is not possible to make the operation intelligible to them, and to place them in a position to give consent or refusal to undergo it, except by the use of the word "spaying." But after this word has been given in explanation, there will remain a certain number of young girls under twenty—for it should be borne in mind that such have been made the subjects of removal of the uterine appendages—who do not understand the meaning of the operation. Under such circumstances—if the operation be necessary—the parents and friends should be made to understand what the operation proposed really is, and we know of no other way of doing this, as a rule, than by the use of the expression "spaying." That a certain reproach is attached to barrenness in women is well known, and this reproach is all the greater when all hope of becoming a mother is destroyed by the removal of the uterine appendages; but the reproach is not in the word, but in the condition secured beyond hope by the operation. We would be the last to use the term "spaying" or "castration" in any way offensively or as a term of reproach, but we advise its use in justice to those who are about to be subjected to the operation, and to their friends.

Annotations.

"Ne quid nimis."

THE ERASMUS WILSON BEQUEST.

A VERY influentially signed memorial (see page 193) has recently been addressed to the President, Vice-Presidents, and Council of the Royal College of Surgeons of England referring to the disposal of the Sir Erasmus Wilson bequest, and directing their special attention to the need of support of certain collateral branches of medicine, "which can only flourish by liberal pecuniary aid." The memorialists suggest to the Council the great desirability of founding an institution under the direction of the College, having for its object "Physiological and Pathological Research." They deplore the absence of any such institution in England, and that English students should have to look to continental schools for the elucidation of such questions, for instance, as tubercle or hydrophobia. They draw attention to the splendid laboratories which exist not only in the other capital cities of Europe, but in comparatively small towns,

such as Leipzig or Bonn; and while pointing out that there is little or no prospect of such an institution being founded by the Government, they urge its national importance, and the value of the scientific work and training which could be carried on under the auspices of such a body as the College of Surgeons. This memorial was at the last Council meeting referred to the committee appointed to consider as to the disposal of the Erasmus Wilson legacy. We can only hope that such an evident hiatus in our higher educational establishments will appeal to their judgment and good sense, the more so as the memorial is signed by some of the foremost scientific men of the day. Rumours have been published that extensive pulling-down and rebuilding schemes are contemplated, and that enlargement of existing departments rather than the foundation of new ones finds most favour with those whose voices command the greatest attention at the Council table. Scientific men will await the deliberations of this committee with considerable interest; should they decide to devote some of the funds at their disposal to the above purpose, it is not unreasonable to hope that other funds in process of time may be placed at the disposal of the College to enlarge, amplify, and further endow this kind of work. It is not a little curious that, of all European capitals, London alone should be entirely without a physiological and pathological institution, open to its scientific men, for the elucidation of such questions of public health as those just mentioned, among many others. The Council of the College of Surgeons have now a magnificent opportunity to make good this great want. We sincerely hope that they will not fail to avail themselves of it, and of the occasion it affords of consulting the opinions of the great body of Fellows and Members, whose voice should unquestionably be heard in a matter of such public no less than professional importance.

THE VENTILATION OF CHURCHES.

A PROVINCIAL contemporary relates a serious accident which occurred at Staplegrove Church, near Taunton. About the middle of the service it is said, many of the congregation felt a peculiar faintness, which by the time the sermon was drawing to a close caused several to fall "like ninepins about the church." The lady organist is reported to have fallen on her face in the aisle, while several others followed her example, the rest of the congregation escaping through the doors, faint and overcome. Probably it will be found that the disaster was caused by the accidental introduction of carbonic acid gas from a coke furnace into the interior of the church; but, however this may be, we hope it will lead to a thorough investigation into the ventilation of churches. It is often pleaded, we cannot help feeling unjustly, that other influences than those of ventilation are sometimes the occasion of the drowsiness of congregations. The clergy are therefore perhaps interested in the subject not less than those who attend their churches; but we would beg to remind medical officers of health that their duties include the recommendation of proper ventilation of places where large assemblies are held, and that this is so far recognised by the Legislature that metropolitan medical officers are required by the Metropolis Local Management Act "to point out the most efficient modes for the ventilation of churches, chapels, &c." It would be an instructive piece of work for any health officer to give an account of the various methods of warming and ventilating the churches and chapels in his district, and by comparing one with another to show the reasons of their failure to keep the congregation warm without contributing to the drowsiness which is not infrequent in these buildings. He would undoubtedly find that in many instances no serious attempt is made to warm the church until very shortly before the service commences; the walls are necessarily cold, and thus a higher temperature is required for the air which is admitted to compensate for this disadvantage. The hot air is almost invariably admitted from the floor alone; and as insufficient ventilation is provided in the roof, the hot column of air, which rises as high as possible, presses down until all the colder air beneath is excluded. At this period the congregation are warm, but the air they breathe has become more or less polluted, and the effects of carbonic acid become in corresponding degree evident. The use of flues or shafts for carrying off the heated air would not accord with the notions of ecclesiastical architecture, and thus it cannot be expected that the atmosphere of a church can be exchanged as rapidly as that of a dwelling-room, although proportionately it may contain ten or twenty times the number of occupants. There are probably no badly ventilated churches which could be satisfactorily improved without material alteration in the existing arrangements, but certainly much could be done by thoroughly warming the structure before it is used, instead of leaving it for days together at a temperature which must approximate somewhat closely to that of the outside air.

A CALCULUS IN THE BRONCHUS.

La Enciclopedia publishes an account, by Dr. Don Luis Montané, of a case communicated by him to the Havana Academy of Sciences. The patient was a young lady from the United States, who up to 1884, when she was first seen, had enjoyed good health. In that year she had an attack of pleurisy on the right side, for which parathoracentesis was performed, which removed 930 grammes of fluid. After this she completely recovered. In the early part of 1886 she was again seen for a persistent dry cough, which was considered to be due to pharyngitis, but which did not yield to the remedies prescribed. A painful spot was complained of at the base of the neck a little above the left sterno-clavicular articulation. Up to May 13th there had been no elevation of temperature; for some days after this, however, there was a slight degree of fever, which was quite unaffected by quinine. The cough afterwards became more spasmodic—somewhat resembling whooping-cough; some streaks of blood also appeared in the sputum. On auscultation occasional dry rhonchi were heard over the left apex, and a slight roughness in the breath sounds; there was, moreover, a want of percussion resonance in the left infra-clavicular region. An active counter-irritant was applied, and digitalis ordered, but no good effect was produced. On the morning of May 20th it was noticed that the respiratory sounds over the left apex had become weaker, and in the afternoon the whole of the left lung was almost impermeable to air, only some very slight rhonchi being perceptible at the apex; the percussion resonance was also highly exaggerated, showing the existence of an emphysematous condition of the entire lung. A consultation was now held with Dr. Jover, who suggested that there might be pneumonia of the apex, and that a pseudo-membranous plug, due to the inflammation, was obstructing the left bronchus. He proposed to order an emetic in the hope of dislodging this plug. After ipecacuanha had been given, the cough became less violent, the fever diminished, and the air entered more freely into the obstructed lung. The next morning, however, all the previous symptoms returned with as much severity as before, and this condition continued till May 24th, when the patient, during a violent fit of coughing, expectorated a hard substance, which proved to be a calculus. It measured one centimetre by seven millimetres, and was irregular, ovoid, and hollow, with a rough surface. Its weight was twenty centigrammes. On analysis it was found to be composed of carbonate and phosphate of calcium. Immediately after the expulsion of this body the

air penetrated freely into every part of the left lung, the cough disappeared as if by magic, and the fever gradually diminished, till in three days' time the patient was perfectly well. The author states that this is the first case of the kind which has been reported in Cuba. Indeed, such a case as this is of extreme rarity everywhere.

THE LONDON UNIVERSITY.

THE House of Convocation of the University of London met on the 18th inst., the chairman of the body, Mr. Frederic John Wood, LL.D., presiding. After the report of the annual committee had been presented and adopted, a long and animated discussion took place respecting the selection of an appropriate motto for use in connexion with the University arms. Several mottoes and proverbs were submitted, but ultimately it was resolved, on the motion of Sir Albert Kaye Rollit, LL.D., that the whole subject be referred back to the annual committee, with power in conjunction with the Senate to select a motto, and that the members of Convocation be invited to send in appropriate mottoes. Sir Philip Magnus presented the report of the special committee on the constitution of the University. He referred to the conference that had taken place between the committee and the Senate, and the desire of the Senate to meet the wishes of Convocation as to the reconstitution of the University. He noted the scheme proposed by the Association and that of the Royal Colleges of Physicians and Surgeons, and concluded by expressing his conviction that the grievance of the medical schools was a real one, which he hoped the Senate would find some way of removing. The questions of the establishment of a Doctorate either of Literature or Philosophy and the regulation of expenses were referred to the Annual Committee, and the meeting was adjourned.

VACCINATION IN PERU.

IT is satisfactory to learn, from a recent number of *El Monitor Médico* (Lima), that some steps are being taken to persuade the Government of Peru to establish compulsory vaccination in the Republic. At present the only place where the compulsory system is in force is in Lima itself, where it has been established as a local enactment by the municipality. Provincial vaccinators find the greatest difficulty in keeping up supplies of lymph, and are frequently obliged to apply to the Lima authorities, who, at the desire of the Government, assist them as far as possible. The Free Academy of Medicine has recently caused the whole matter to be looked into, and a report to be drawn up by a committee of its members. They say that the frequent epidemics of small-pox and the numerous cases that are constantly occurring in most of the towns of Peru are accountable for a large part of the present high rate of mortality; that the experience of all other countries shows that the only way to make vaccination really effective is to render it universal by compulsion, which cannot be carried out without arrangements for supplying lymph to all requiring it; and that the best way of doing this is to confide the charge of a central establishment to a scientific body—that is to say, to the Academy of Medicine. It is remarked that the neighbouring republic, Chili, established compulsory vaccination in 1884, and has an institute of animal vaccination in Santiago which is subsidised by the Government to the extent of 3500 dollars a year. In the case of Lima, the municipality seems disposed to take the burden of establishing a national animal vaccine institute upon itself. The Academy suggests that all parents should be compelled to have their children vaccinated before they are three months old, and that all persons should be revaccinated every ten years. The authorities of all penal and charitable institutions should be obliged to see to the carrying out of the vaccination law, which of course would be rigidly enforced in the army. It is also suggested that the local boards of health should be authorised to give two prizes annually to the most successful vaccinators in the district. The distribution of lymph and the instructions for vaccinators the Academy would wish to have left in its own hands.

PATHOLOGICAL SOCIETY.

THE crowded benches on Tuesday last testified strongly to the popularity of the movement that caused Sir James Paget to accept the presidential chair of the Pathological Society. The acceptance of this office will prove of great value not only to the Society, but to the cause of pathology at large. It is well known that Sir James Paget is disposed to sympathise with every extension of pathological science likely to conduce to the advancement of this important branch of medicine. We were particularly gratified with that portion of his address pointing out that there need be no inconsistency between practice and science. The scientific mind may place all things in a scientific light. The illustrations from clinical medicine by the new President were full of significance and meaning to those who look below the surface of things. Excellent indeed was the recommendation to examine all morbid tissues whilst they are yet living. That there is no exaggeration in the notion that tissues just removed from the body might be regarded as still vital will be conceded all the more when the facts of skin, tendon, and nerve grafting are borne in mind. The occasion was, indeed, an exceptional one for the Pathological Society. The actual combination of the faculties of the pathologist and the orator is necessarily rare, and the audience of last Tuesday signified their appreciation of the presidential appointment by according to Sir James the warmest possible reception of his address. Sir Joseph Lister proposed the vote of thanks for the "beautiful and instructive" address; and Dr. Samuel Wilks, in seconding the vote, echoed the conviction of everyone in his allusion to the youthful vigour of the President's intellect.

THE ETIOLOGY OF PULMONARY GANGRENE.

DR. BONOME of Turin contributes (*Deutsch. Med. Woch.*, 1886, No. 52) some new facts upon the intimate pathology of gangrene of the lung, a condition which supervenes under most varied circumstances, being sometimes the outcome of acute lobar pneumonia in cachectic subjects, or the result of inhalation of putrid matters, or of the embolic impaction of thrombi from infective centres. The gangrene may be limited and circumscribed, or diffuse and widespread; it may be confined to a single area or disseminated in multiple foci—variations depending largely upon the antecedent condition. Dr. Bonome's investigation refers to circumscribed gangrene, and would apparently include the metastatic pulmonary abscesses of pyæmic infection. He describes the focus as divisible into four zones, which, *mutatis mutandis*, could stand also for those of a pyæmic abscess. Thus in the centre, he says, is a necrotic zone made up of the débris of dead leucocytes and of micro-organisms, to which the necrosis is due, this necrotic change including a fibrinous metamorphosis of the protoplasm of the alveolar epithelium (coagulative necrosis) and destruction of the inter-alveolar septa. Then comes a zone of a granular appearance, composed of broken-up leucocytes, which stain deeply with carmine. Around this is a zone of hæmorrhage, whilst outside all is a zone of catarrhal inflammation. Examination of the necrotic focus in fresh specimens revealed, in addition to putrefactive bacteria, masses of micrococci; and cultures in agar-agar and peptone-gelatine enabled the determination of the variety of micro-organism. This

proved to be the staphylococcus pyogenes aureus and albus, and its special necrotising power was proved by inoculation of pure cultures both directly into the lung and indirectly through embolism. In this way pulmonary gangrene can be artificially induced in rabbits, control experiments with other microbes—as the pneumococcus and microsporon septicum—failing to produce the same effect. The staphylococcus is the micro-organism which has been proved to excite infective osteomyelitis, furuncle, paranitium, inflammation of subcutaneous tissue, and ulcerative endocarditis,—so that its action upon lung-tissue is not singular. It may be introduced into the lung either directly through the air-passages or metastatically conveyed by the blood-stream (embolic gangrene). Wounds of the lung by instruments infected by the staphylococcus pyogenes rapidly produce necrosis and inflammation. The putrefactive process is caused by the free entrance of saprophytes by the bronchi; the peculiar odour of gangrenous foci being due to this secondary change induced by contact of the necrotic patch with atmospheric air.

DEATH OF A CADET AT WOOLWICH.

THE recent death of one of the cadets of the Royal Military Academy, Woolwich, from a fall while sliding on an extemporised slide, is the first that has occurred in the hospital since it was attached to the Academy some forty years ago. The case from a medical point of view is instructive, as showing what serious results may follow a blow on the head which at first is thought but little of. In this case the patient was able to walk about and take his meals after his fall, and it was not till the middle of the night that the surgeon was called to him on account of severe pain referred to the zygoma, which was the part struck. He was then removed to the hospital, which is distant two or three hundred yards, and walked there without difficulty. The patient slept and took his breakfast. In a few hours, however, coma came on, preceded by sudden accession of acute agonising pain in the head, death occurring in the afternoon. At the necropsy an immense clot was found between the base of the skull and the dura mater, the blood having come from a small puncture in the middle meningeal artery, caused by a minute spicula of bone which had been detached from the suture between the orbital plate of the frontal and the left wing of the sphenoid.

THE DARENTH HOSPITAL DISPUTE.

THE question whether the hospital at Darenth should be constructed with wood or brick—that is to say, whether it should be temporary or permanent—came again before the Metropolitan Asylums Board at their meeting on Saturday. The occasion for the further consideration of this subject was the receipt of a letter from the Local Government Board agreeing to the proposal of the managers that the material to be used should be brick, but that the managers should modify their former proposals as to the manner in which the institution should be constructed so as materially to reduce the cost. The opposition to a brick building which has been shown by various district authorities is evidently due to the belief that, inasmuch as wood is a less expensive material than brick, it is more economical to use the former. The determination of the managers to persist in their intentions is based upon the fact that in the course of time wooden structures cost more money than those which are of a more permanent nature. The objection of the Local Government Board is founded upon the uncertainty of medical knowledge as to the proper method of construction of small-pox hospitals. It is matter for regret that the Central Board have not freely placed before the managers the whole of the information available with regard to this point; they would undoubtedly have carried the managers with them. But, as we have already pointed out, the use of wood or brick is merely incidental to the real question which underlies the whole—viz., the means which must be taken to prevent the small-pox hospital being a source of danger to the neighbourhood in which it is placed. There is much reason for believing that the aggregation of persons convalescent from small-pox is in its effects very different from that of persons in the acute stage of the disease. But although the Darenth Hospital is intended for convalescents, it may be accepted that it will, in the course of epidemic pressure, eventually receive a much larger number of acute cases than Mr. W. H. Power found to be necessary for the dissemination of the disease. There is no economy in building even a temporary hospital upon principles which do not include a full recognition of this fact; and the authorities who fail to be guided by the experience of past epidemics or to take measures for adding to the knowledge which already exists are incurring a serious responsibility, and will find eventually it will be no easy matter to justify their procedure when the influence of small-pox hospitals is more fully known.

"ON SOUL AND CONSCIENCE!"

THE medical certificate constitutes one very useful safety-valve for educational over-pressure. Were its just influence ignored, the effect on the public health would be far from satisfactory. Were the same influence pushed into abuse or indiscriminately applied, it would certainly come into contempt, with a like result. According to the School Board of St. Cyrus, the medical profession in that parish is not guiltless in this particular; but the remedy suggested at a recent meeting is certainly a novel one. A member proposed with all gravity, as a possible solution of the difficulty, that absentees must be excused on the ground of illness, which would not in future be admitted on the mere assertion of a medical practitioner, but must be certified by him "on soul and conscience." This proposal, it seems, was not intended for burlesque. Whatever it means, it is not likely, we fear, to improve materially the school attendance at St. Cyrus. Probably the most practical means of correcting the truant tendency, if it is really to be so described, would be to issue a form requiring certifying practitioners to state precisely the fact of a personal examination and the nature of the illness for which a certificate is granted. We need hardly again impress on our medical brethren the need of due care in examination, as malingering is by no means unknown among children.

MORPHINE IN DIABETES.

THE good effect in certain cases of diabetes of administering morphia has seldom received better illustration than is afforded by a case recorded by Dr. Mitchell Bruce (*Practitioner*, Jan. 1887). The patient was a printer, aged twenty-six, and was under observation for ten months. During this time a series of observations were made as follows. For two days he was placed on ordinary mixed diet without medicine, and the average daily excretion of sugar was estimated at 1360 grains. In the second place, for about three weeks he was kept on "strict Pavy diet," but without any notable diminution in the amount of sugar excreted. This was followed by a third series of observations, when, with continuance of the rigid diet, acetate of morphine was given by the mouth in increasing doses, commencing with fifteen minims, every four hours. The amount of sugar began to diminish notably. On the fifteenth day, when three grains of acetate of morphine were being ingested daily, the sugar had fallen to 912 grains; on the forty-eighth day (4½ grains of acetate of morphine) to 360 grains; and from the fifty-sixth to the sixty-first days of this treatment (4½ grains of acetate of morphine) sugar was entirely absent

from the urine. It was only towards the end of this series of observations that any narcotic effect, and that inconsiderable, was produced. On discontinuing the drug, but still maintaining the rigid diet, there was a rapid reappearance and daily increase in sugar—viz., from 600 to 2400 grains. Still continuing the diet, observations were now made of the effect of morphine administered hypodermically, with gradual increase from about ¾ grain up to 3 grains per diem. The amount of sugar excreted never fell below 768 grains, whilst the drowsiness of the patient required a reduction in the drug, with an increase in the sugar excreted, until the latter reached 3000 gr. Recourse was now again had to the administration by the mouth, and by the seventeenth day of such administration the sugar had fallen from 4000 to 1000 grains; by the forty-fourth day it reached 882 grains; but it was not until the ninety-ninth day, when seven grains of the acetate were being given daily, that the sugar was reduced to a mere trace. The patient's general condition correspondingly improved. Dr. Bruce, in his concluding remarks, considers that the glycosuria in this case was proved by the foregoing results to be due to an increased income of sugar in the blood, and not to its diminished destruction in the system; for the morphine had less influence on the glycosuria when introduced into the general circulation than into the portal circulation. It also showed that glycogenesis was still active, and that this was going on mainly in the liver; and that, if of nervous origin, the disorder was in the liver itself, and not in the central nervous system. For whilst the hypodermic administration produced marked depression of the central nervous system, the drug given by the mouth had much less effect, operating mainly on the glycosuria.

THE GREAT NORTHERN CENTRAL HOSPITAL.

THE men of the north of London have an object well worth their consideration and sympathy in the Great Northern Central Hospital. This subject divides itself into two parts—the maintenance of patients in the existing hospital in the Caledonian-road, and the provision of funds for building the new hospital in the Holloway-road. We regret to see that on both heads the financial report at the annual meeting (Mr. Marshall Lang in the chair) is unsatisfactory. The maintenance fund is £657 short of last year, and the funds in hand for the new hospital are so small that the promoters have determined to proceed with only one block of buildings, at a cost of £2000. This is highly judicious on the part of the committee, but we trust that in this Jubilee year we shall see them supplied with the £24,500 required to make the new hospital complete and worthy of the populous district by which it is surrounded

HEALTH OF MAURITIUS.

THE annual report of the medical department of Mauritius for the year 1885 is remarkable chiefly for the very small amount of information which it furnishes on the subject of the health of the population. It states that the health of the colony was by no means satisfactory. "Some localities in Mauritius are as healthy as England, and others again are little less than pestiferous." But it does not give a single figure to show what was the death-rate of the island generally, or of any of the districts, with the exception of Rivière du Rempart, in which it amounted only to 21·82 per 1000 of the population. This total absence of detailed information as to the death-rate is the result, apparently, of the returns which were furnished not being printed—an instance of extravagant economy, for without them the report is of scarcely any value. We would suggest to the Chief Medical Officer that in future, instead of merely referring, as in the present report, to tables which may not be printed, he should state in the text of the report the numerical results which are shown by them. As illustrating the very unhealthy condition of the island, and at the same time the prevailing distress, the Chief Medical Officer states that about 44,000 cases of disease were treated in the medical institutions of the colony in 1885, but he does not state the population. Assuming it to be 370,766, as given in Whitaker's Almanack, this would show that one in eight had thus obtained medical relief. The report shows that 15,488 cases were received into the public hospitals, and of these 1366 died, being in the ratio of 88·24 per 1000 treated. This high death-rate was, doubtless, to a considerable extent due to the condition of the patients on admission, for in the Civil Hospital, for which alone the details are given, of 598 deaths 213 took place within forty-eight hours after admission. Malarial fevers, including under that term also cases returned as "malarial cachexia," were the most prevalent and fatal diseases admitted into the public hospitals; there were 5749 cases returned with 240 deaths; of dysentery there were 693 cases and 216 deaths; and of pneumonia and pleurisy there were 264 cases and 156 deaths. Pneumonia appears to be a very fatal disease in the island; at Powder Mills Hospital 21 cases were admitted, and all died—"a fact sufficiently remarkable to deserve explanation," but of which no explanation is given. We cannot but regret that the information repecting the health of the island is so very meagre, but we trust that before the next annual report is due the Chief Medical Officer may be able to satisfy the Governor of the necessity for publishing the usual statistical tables, if the report is to have any practical value.

DENTAL CARIES IN BAKERS.

DR. FR. HESSE has given a detailed description in a recent number of the *Deutsche Monatschrift für Zahnheilkunde* of a peculiar form of caries especially affecting the outer surfaces of the teeth. The caries is soft, rapid in its progress, and penetrates deeply. It commences at the neck where the tooth is in contact with the gum, and extends more towards the free cutting edge than towards the fang. The discolouration produced is of a brownish tint. It commences early, usually attacking patients between the ages of seventeen and twenty-three. He refers it to the inhalation of meal dust, and thinks it also occurs in millers. It most commonly first attacks the upper front teeth, eating away the enamel, the eroded edge of which is sharply defined, and exposing the dentine, which assumes a brownish or even black colour. The same conditions are found in sugar-bakers and in confectioners, both of whom remain long in rooms the air of which is loaded with sugar dust, and who have often to taste hot saccharine substances. Hesse therefore considers this condition to be caries induced by sugar. A similar defect is found in the front teeth of children who are fed with certain kinds of saccharine farinaceous food, such food being often in a state of acid fermentation.

DIPHTHERIA AT BASSINGBOURN.

A SERIOUS epidemic of diphtheria, which attacked sixty children in thirty-seven families in the adjoining parishes of Bassingbourn and Kneesworth in the Royston rural district, has just been reported on by Dr. Anningson. The epidemic commenced on June 13th last, and continued for fifteen weeks until Sept. 25th, and the peculiar feature attaching to it was its apparent connexion with a polluted water-supply at the elementary school. The incidence of the disease was certainly very marked on the girl's side, where this polluted water was available, but at the same time it is difficult, in the face of the existence of other means of diffusion, such as are in operation in an elementary school, to eliminate all the usual conditions favouring personal com-

munication, and to assign the disease to a water-supply. The Bassingbourn outbreak is regarded as having, in the first instance, been brought about by the recrudescence of a previous epidemic, and school assemblage is admitted to have been a main cause of its introduction. Hitherto, although there have been similar cases in which polluted water has appeared to have been associated with the spread of diphtheria, this circumstance has, as a rule, been overshadowed by some more potent factor, such as personal communication during school attendance. The influence of such attendance in causing diphtheria is well known; that of a polluted water-supply is as yet not definitely made out. But all such cases as that under consideration are well worthy of study in this connexion.

METROPOLITAN SEWAGE DISPOSAL.

WE observe with regret that the Metropolitan Board of Works have accepted an estimate to provide, at an enormous cost to the metropolis, the tanks and jetty which are necessary for treating London sewage in the manner upon which the Board had previously decided. We have recently so fully discussed this matter, that we fear it will serve little purpose to reiterate the arguments we adduced against this method; it will be sufficient for most of the ratepayers to know that the Metropolitan Board is acting in defiance of the recommendations of a recent Royal Commission which carefully studied this subject in all its bearings. The Metropolitan Board only indirectly represents those who will have to bear the cost of this unwise undertaking; they represent the vestries and district boards, and upon them must devolve the chief duty of opposing the scheme against which we have felt it necessary to protest. But we observe with much satisfaction that an influential meeting of ratepayers was held on Wednesday to consider the question of London sewage disposal, and that at this meeting a resolution was adopted strongly protesting against the action of the Board. A committee has moreover been appointed, which will, we trust, urge this view upon those who are responsible for the wasteful expenditure contemplated. We are not, however, sanguine of the result. It will be very difficult for the Metropolitan Board at this period to withdraw from a position which has already been taken up, but we gladly see the effort made to induce them to adopt this course, if only to demonstrate that the metropolis as a whole is not wanting in wisdom.

THRIFT IN COOKERY.

ECONOMY in the kitchen has long been recognised as a domestic virtue; and in these days, when cooking has become more than ever a fine art, it is satisfactory to note that old-fashioned household thrift can well keep pace with the advance of custom. Important as this fact is on general grounds, it is no less important in the treatment of the sick. In the various forms of fever, as is now generally admitted, the value of suitable nourishment can hardly be exaggerated. The case is not different in instances where the failing powers of age rather than the nature of disease form the chief obstacle to recovery. Here time gained may be life saved, and a diet at once palatable and digestible therefore becomes a primary consideration. For the wealthy invalid such a diet is not difficult to obtain; the resources of cookery are at his command. The poor in illness are less fortunate, though much may be accomplished in the same direction by the introduction among them of simple but efficient means of cooking, which appear in careful hands to answer many of the purposes of a more elaborate system. Of this we are reminded by the excellent teaching conveyed in a small and practical manual by Miss E. de V. Mathew, entitled "Cookery for our Sick and Invalid Poor." This little work contains a large number of recipes, with hints as to ready methods in cookery, which bear the mark of experimental training. Some of the dishes enumerated seem to us rather too rich for an invalid. This defect, if it prove such in practice, a little judgment might easily remedy. In another pamphlet the same lady treats of "Tinned Meats &c., and how to use them." It is an unfortunate thing that the wholesomeness of food preserved in this way is not yet so far above suspicion as to render all care in its selection unnecessary. This fact does not, however, suffice to forbid the discriminating use of such food, and it does not in any way impair the general excellence of the advice contained in the pamphlet just mentioned. Whilst on this subject, we may direct attention to a device introduced by Mr. H. T. Tallack, of Hatton-garden, in the shape of stout steel skewers, each headed with a hollow iron sphere, and which being thrust deeply into the substance of the joint prepared for roasting, serves to conduct the heat more readily into the centre of the meat, thus ensuring more rapid and complete cooking.

MEDICAL FEES IN CROWN CASES.

WE have often in our columns directed attention to the inadequate fees paid to medical witnesses in Crown cases. In a manslaughter case at Wigan, last week, Dr. Brady, one of the medical witnesses, refused, when before the magistrates, to be bound over to appear at the Liverpool Assizes, alleging as a reason that he would not undertake to leave his patients and practice from day to day to attend the Assize Courts at Liverpool for the remuneration offered by the Crown. He was willing to give evidence and render what assistance he could when called upon, but he would not from day to day wait about the Assize Courts till called upon for £1 1s. per diem. The magistrates on the bench threatened him with all the pains and penalties possible if he refused to be bound over, and the assistant magistrate's clerk stated that, with an experience of thirty-five years, it was the first time he had known a professional witness refuse to be bound over. Dr. Brady assured the clerk it was not too late to begin, and he was eventually allowed to leave the court without being bound over. We agree with Dr. Brady as to the inadequate remuneration, and think it ought to be two or three guineas at least. A medical practitioner's time is usually too valuable, not only to himself, but to his patients, to be wasted in waiting about law courts day after day.

SIMPLE METHOD OF ESTIMATING THE EFFECTS OF RESPIRATION.

MM. HANRIOT and Ch. Richet have described a method of measuring the oxygen inhaled and absorbed, also the carbonic acid formed, during respiration, which is much more simple than the usual method by weighing, and is adapted for carrying out at the bedside. A gas-meter measures the volume of air inhaled, and a second that of the air expired; this air is then passed through potash and subsequently through a third gas-meter. The difference between the second and third meters of course gives the carbonic acid formed, and the difference between the first and third the oxygen absorbed.

POLICE EMERGENCY CASES IN EDINBURGH.

THE Public Health Committee of Edinburgh have had before them the arrangements for securing medical attention for emergency cases. The question of appointing police surgeons in different districts was raised, but was not favourably received. The present system was approved, by which the nearest practitioner is to be summoned by the police, who are to give remuneration according to the time at which the service is required.

THE ELASTIC LIGATURE FOR UTERINE FIBROIDS.

THE removal of uterine fibroids by means of the elastic ligature having been recently adopted by Prof. Slavyanski in four cases, a paper has been published by one of his pupils, Dr. Zhabotinski, dealing mainly with the history of this method of operating. He has collected accounts of 216 cases, of which 151 are British (44 being Dr. Robert Lee's), 27 French, 20 German, 10 Russian, 5 American, and 3 Italian. Of these 18, or 8·3 per cent., proved fatal—8 from peritonitis, 3 from septicæmia, 3 from exhaustion, 1 from pleurisy and peritonitis, 1 from meningitis, 1 from tetanus, and 1 from an accidental disease. In 12 of these death occurred before the tumour came away, and in the remaining 6 after separation had taken place. The author thinks that the opinions of West and M'Clintock on the dangerous character of this method of procedure were formed on the results of too small a number of cases, and that as most of the published cases occurred in pre-antiseptic times the danger with modern methods may be looked upon as very slight. The mode of procedure which Prof. Slavyanski adopted, and which in Dr. Zhabotinski's opinion is the best, is to cut away the tumour after the elastic ligature has been applied to the peduncle. This seems to have given the best results, even before the days of antiseptics. The main indications for the elastic ligature operation are a pedunculated condition of the tumour, an accessible situation, and a disposition to hæmorrhage.

THE GENERAL MEDICAL COUNCIL.

PURSUANT to the provisions of the Medical Act of 1886, the following appointments have been made:—Dr. John Struthers, to represent the University of Aberdeen; Dr. William Leishman, the University of Glasgow; Sir William Turner, M.B., the University of Edinburgh; Dr. William Moore for Ireland; and, as announced last week, Professor Bell Pettigrew, the University of St. Andrews.

THE ELECTRIC LIGHT IN MINES.

AMONG the future possibilities of the electric light, there is probably none which possesses more interest than its adaptation to the lighting of mines. The advantages which must follow its use in this way are at once obvious. Darkness and fire-damp between them will account for the majority of the more serious as well as for many lesser accidents to miners, and they are dangers which cannot better be avoided than by the general adoption of a mode of lighting which ensures at once brilliant illumination and the perfect exclusion of gas currents from the lamp flame. Now that the one disqualification which can be urged against the electric light—namely, that it does not serve as a test for gaseous impurity in the air of the mine—has been removed by attaching indicators to the lamps used underground, we may indulge a hope that the cost of introducing new lights and electric machinery will not long be allowed to oppose this much-needed reform.

ENDEMIC GOITRE IN CENTRAL ASIA.

SURGEON G. M. GILES, M.D. Lond., surgeon to the I.G.S. *Investigator*, who was sent on special duty with Colonel Lockhart's Mission to the Gilghit and the Paman Plateau, furnishes an interesting paper to the *Indian Medical Journal* on the Prevalence of Goitre among the Denizens of the Highlands of Central Asia. Dr. Giles is inclined to attribute the disease to the habits of the people who live in dark mud huts with no entrance for light but the door, and to the absence of trees on the surrounding hills. He speaks very highly of the treatment by injections of iodine into the cysts, at intervals of a week or so, and lays great stress on the use of a watery, not an alcoholic, solution of the drug. His highly favourable opinion of the efficiency and harmlessness of iodine is founded on the result of some three hundred injections.

DENTAL SURGERY ON THE CONTINENT.

ACCORDING to the *Independent Practitioner*, in Austria and Hungary there were until lately no dentists, medical men alone being allowed to practise dentistry. Before the year 1876, in order to practise dentistry in Holland, it was necessary to hold the diploma of medicine, surgery, and midwifery. The law has now been amended, a special course of study and special examinations having been provided for, as in Germany, Russia, and Switzerland. Is not this non-insistance on medical qualification rather a retrograde step?

THE "JACOB" TESTIMONIAL.

THE subscriptions to the Jacob testimonial fund which have been handed in or promised up to the present amount to about £210. The lengthy list of subscribers shows how general and widespread is the desire of the profession to mark in an appreciable way its esteem for Dr. Jacob.

THE DISCUSSION ON RABIES AT THE FRENCH ACADEMY.

THIS debate, says our Paris correspondent, whose letter we are obliged, from want of space, to hold over, was concluded on Tuesday last. M. Peter read particulars of two new cases in which death had occurred from rabies after the intensive inoculations. M. Vulpian praised Pasteur's work, and criticised the statements and conclusions of M. Peter; after which M. Brouardel spoke, and the discussion terminated.

FILARIA SANGUINIS HOMINIS.

DR. STEPHEN MACKENZIE gave, at the Clinical Society on the 14th inst., a most successful demonstration of the living filariæ from the blood of a gentleman—a member of the medical profession—suffering from chyluria. The microscopical preparations were seen by a large number of members of the Society.

M. BLONDIN.

VIEWED from a physiological point, the performance of M. Blondin at the Agricultural Hall must be regarded as one of the marvels of the age, which grows more wonderful every year. Such feats as his are remarkable when done by men of twenty, but done at the "grand climateric" they are trebly so. Though on close inspection it is seen that M. Blondin bears marks of age, his step on the rope, and his self-command in a "poke" or on his bicycle, are as perfect as ever.

FOREIGN UNIVERSITY INTELLIGENCE.

Dorpat.—The Heimburger prize, amounting to about £50, has been awarded to a former Dorpat student, Dr. Erich Harnack, Professor of Physiological Chemistry and Pharmacology in Halle, for his treatise on Materia Medica and Prescribing.

Gratz.—For the vacant Professorship of the Diseases of Children the names of Drs. Soltmann of Breslau, Epstein of Prague, Von Hüttenbrenner of Vienna, and Tschumer of Gratz have been brought before the Medical Faculty. For the Professorship of Ophthalmology, vacated by Prof. Blodig, the claims of Drs. Becker of Heidelberg, Eversbusch of Erlangen, Sattler of Prague, and Schnabel of Innsbruck having been considered, the last was invited to accept the chair.

Groningen.—The death is announced, at the age of thirty-eight, of Dr. Johann R. Ranke, Professor of Surgery. The

deceased professor was a German by birth, and was formerly assistant to Prof. Volkmann.

Kieff.—Dr. D. V. Chirkoff of Moscow has been appointed Professor of Special Therapeutics.

Madrid.—The death is announced of Dr. Gonzalez Encinas, Professor of Clinical Surgery, and one of the most distinguished operators in Spain.

Naples.—A Professorship of Orthopædic Surgery has been established.

Paris.—M. Pajot has resigned the chair of Midwifery owing to his advanced age. M. Farabeuf has been appointed Professor of Anatomy, in succession to M. Sappey. M. Gabriel has been appointed Professor of Physics, in succession to M. Gavarret. M. Dieulafoy has been elected to the chair of Internal Pathology, in succession to M. Hardy. M. Moisson has been appointed Professor of Toxicology in the École Supérieure de Pharmacie. M. Chatin has been chosen Assistant Professor of Zoology in the Faculty of Sciences.

DR. WILLIAM PERRY, of Exeter, N. H., the oldest living graduate of Harvard, celebrated the ninety-eighth anniversary of his birthday on the 22nd ult. Dr. Perry is the sole survivor of the passengers on Robert Fulton's steamboat on its trial trip down the Hudson seventy-nine years ago, and he was a member of the class of 1811 at Harvard College, of the members of which there is only one other survivor.

IN connexion with the outbreak of small-pox on board the German steamer *Preussen* from Southampton to Adelaide, we are requested to point out that although foreign steamers call at British ports to embark passengers, they do not necessarily come under the sanitary supervision which the Board of Trade exercises over British steamers under the Passengers Act.

CHOLERA is now prevalent on both sides of the continent of South America. It has increased in Chili, where it is fatally spreading in the province of Valparaiso; and it has since been reported to have broken out at Monte Video, in Uruguay. Situated as Monte Video is at the mouth of the river La Plata, considerable commercial interests are likely to be involved.

A NEW bi-monthly publication, devoted to the Diseases of Children, the *Centralblatt für Kinderheilkunde*, will be published in Vienna on the 1st of March next. The editor is Dr. R. W. Raudnitz, and the English collaborator, Dr. H. Ashby of Manchester.

BY the death of Colonel Bolton, which we announced last week, the office of Water Examiner under the Metropolis Water Act has become vacant. This is really an important public health appointment, and should be held by a medical man having special knowledge and experience in sanitation.

AT the next meeting of the Hunterian Society, on Wednesday, January 26th, Mr. Croft will contribute a paper on the Immediate Treatment of Fractures, and give a demonstration of his mode of applying plaster-of-Paris splints.

IT is satisfactory to have to announce that the Naval Medical Good Service Pension of £100 a year has been awarded to Sir William Smart, K.C.B., the senior officer on the retired list of Inspectors-General.

THE Berlin police department is doing its best to discourage the sale of quack medicines by issuing warning notices to the public.

AN International Health Exhibition, referring especially to foods and cooking, under the presidency of M. Chevreuil, is to be held next month at Lyons. It will be open from the 20th to the 28th proximo.

THE annual general meeting of the Neurological Society will be held at the National Hospital, Queen-square, at 8.30 P.M. on Thursday, January 27th. The President-elect is Dr. Samuel Wilks, F.R.S.

IN many parts of Bavaria diphtheria has been very rife. It is thought that fully 10,000 children have been affected there being 3000 in Bamberg alone. In several localities the schools have been closed.

A SUCCESSFUL meeting of the Association of General Practitioners was held in Exeter Hall on the 19th inst. We hope to publish in our next issue a detailed account of the proceedings.

IN the Eghri-Capon quarter of Constantinople there is at present a great deal of small-pox, some forty-five deaths having already occurred.

WE are glad to hear that a matter which has excited much painful interest in one of our northern universities has been satisfactorily settled by apology and retractation.

Pharmacology and Therapeutics.

BROMIDIA.

BROMIDA, a sample of which has been forwarded to us by Messrs. Roberts of New Bond-street, is a combination of bromide, chloral, hyoscyamine, and cannabis indica, and is acknowledged to be a valuable hypnotic. The combination seems to be peculiarly efficient, for cases of insomnia have been relieved by it when each of the drugs mentioned had individually failed.

DIFFERENT METHODS OF TREATING CERVICAL CATARRH.

Dr. L'voff of Kazan has reported in the *Meditsinskoe Obozrenie* a number of observations made on the comparative value of different methods of treating catarrh of the cervix uteri. The total number of cases was eighty-two. Of these thirty-six were treated by mechanical scraping of the mucous membrane, eighteen by means of powerful caustic applications, and twenty-eight with weak caustics. The method of applying the weak caustics was, after washing out the vagina with warm water or a solution of boracic acid, to swab the cervical canal with tincture of iodine or with a 10 per cent. solution of chromic acid. This was done once a week, plugs soaked in glycerine of tannin being also used every other day. The strong caustic application consisted of a bougie made of sulphate of zinc and alum fused together. This was allowed to remain in the canal till it had all dissolved, which took place usually in one or two hours. Afterwards the mucous membrane presented a white appearance, due to the eschar. This fell off in five or six days, during which time warm vaginal douches were administered and plugs of glycerine and iodoform inserted every alternate day. In the cases treated by scarification an iodoform and glycerine plug was left in for twenty-four hours, and the patient was then sent home. The results of these different methods of treatment were that the mild caustics ultimately effected a cure, but required at least two months to do so; while the severer methods—that is to say, the fused zinc and alum and the scarification—produced a permanent cure in about a fortnight. The author adds that no unpleasant symptoms were caused by either the caustics or the scarification in any of the eighty-two cases.

RUSSIAN PEPSINE

The comparative value of different preparations of pepsine and papaine as peptonising agents has recently been investigated by Dr. Lipski of St. Petersburg. He finds that the

best of all the dry preparations he tried was the pepsinum saccharatum siccum of the Russian Pharmacopœia, 2 grms. of which, when freshly prepared, digested 9·53 grms. of albumen. From his results it appears that the Russian pepsines are far more active preparations than most of those in use in western continental Europe. Dr. Lipski did not apparently make any determinations of the value of any English or American preparations.

ANTIFEBRINE IN TYPHOID.

Antifebrine has been used a great deal in Professor Kotovshcheski's clinic in Kazan in typhoid fever cases with good results. After a single four-grain dose, the temperature sank in the course of an hour 0·9° to 2° C., the reduced temperature persisting for from an hour and a half to three hours. It was found that by repeating these four-grain doses every two hours the temperature could be kept at the normal point all day. The frequency of the pulse was at the same time diminished and its tension increased. The excretion of urea was also augmented. The patients liked the drug, and no ill effects were ever observed from its use.

SALICYLIC ACID IN FOOD.

M. Vallin has presented a report to the French Government on the employment of salicylic acid in articles of food, in which he states that medical observation has established that even small quantities of salicylic acid, or its derivatives, if taken constantly, are capable of affecting the health of certain subjects who are peculiarly susceptible to the influence of this drug, as also the health of aged persons and those whose renal and digestive organs are not perfectly sound. He consequently advises that the addition of salicylic acid and the salicylates, even in small quantities, to solid and liquid articles of food should be prohibited.

ICHTHYOL IN ERYSIPELAS.

Dr. Nussbaum of Munich has recently obtained strikingly successful results in traumatic erysipelas by the use of an ointment composed of vaseline with 10 per cent. of ichthyol, a chemical substance rich in sulphur, obtained from mineral oil, which was introduced by Dr. Unna a few months ago, and which was found useful by Dr. Dubelir of Moscow in acute and chronic rheumatism (see THE LANCET, Oct. 2nd, 1886) both as a medicine and as an external application. Dr. Nussbaum found, as indeed Dr. Dubelir also remarked, that the ichthyol had an irritating effect on the skin, so that it could not well be borne for more than three days, but as this was long enough to effect a cure in all the cases no difficulty on this head arose.

PULVERISED SPLEEN IN CHLOROSIS.

The German medical papers quote some observations made by Dr. Predazzi at Prof. Maragliano's request, on the value of treating chlorotic patients with an emulsion of pulverised spleen, bitter almonds, and brandy. In the five cases in which this was adopted, rapid improvement took place both in the general condition of the patients and in the physical signs; that is to say, the number of red blood-corpuscles was increased, as also the arterial tension and the body weight. The author does not attempt any explanation of the action of this singular remedy. The quantity of "polp. splenic." given daily was about five ounces, and it was ordered at meal-times.

PROTECTIVE INOCULATION FOR BOVINE CONTAGIOUS PLEURO-PNEUMONIA.

THE animal plagues which have for so many years committed such havoc among our flocks and herds are gradually becoming amenable to the measures of sanitary police devised for their limitation and ultimate suppression. Indeed, one of the most troublesome and costly of these maladies—that popularly known as the foot-and-mouth disease—seems to be entirely eradicated from our soil after harassing cattle-owners since 1839, as no cases have been reported in the three kingdoms for several months. But its companion disease, the so-called lung-plague, or "pleuro," as the dairymen and butchers designate it, which appeared in Great Britain in 1842, yet lingers in some parts of the country, and particularly in Scotland, in spite of the efforts of local authorities. This disorder has been a most serious scourge, not only in the United Kingdom, but also on the European continent, notably in Holland (which has now, however, stamped it out), from which country it was originally introduced into our own. Within the last thirty years it has been carried into nearly every part of the world, and its desolating effects are now being experienced in South Africa, Australia, and the United States of America. The difficulty in suppressing it is mainly due to its insidiousness—the invasive stage being most difficult to detect—the uncertain duration of incubation; and the fact that an animal which has been imperceptibly affected, or which has apparently recovered, may for a long time afterwards infect healthy cattle, owing to a necrosed piece of lung, more or less encapsuled, continuing to give off infective elements during expiration.

The disease, unlike rinderpest and foot-and-mouth disease, appears to be exclusively confined to the bovine tribe, all attempts to transmit it to other species having failed; and no authentic instances of accidental transmission to other animals or mankind, even by the ingestion of the milk or flesh of diseased cattle, are recorded.

In order to diminish the ravages of this lung-plague, protective inoculation, first introduced by Dr. Willems of Hasselt (Belgium) some thirty years ago, has been resorted to in this country, on the Continent, and in South Africa and Australia. The value of this procedure has been thoroughly established, the protection afforded by the inoculations having been demonstrated in the most marked manner during outbreaks of the disorder, and also by the experiments instituted by commissions appointed by the Governments of France and other countries. The virus for inoculating purposes is obtained from the diseased lung at a certain stage, and, as may be surmised, great care is necessary not only in collecting and keeping it, but also in introducing it into the body of the ox which is to be protected. Indeed, success or failure depends upon the skill of the inoculator, as he must not only be cognisant of how to obtain the material in its purest and most active condition but also when and where to introduce it, and how to control its action when inoculated. The infectiveness of the virus is extraordinary. If a drop of the serous fluid from a diseased lung is inserted beneath the skin of a part where the connective tissue is loose and abundant—as in the dewlap of the ox—the effect is most serious, death being the result in almost every case from rapid extension of the morbid process set up to vital organs. To obviate such unfortunate accidents, the extremity of the tail is now selected, as there the connective tissue is scantier and denser than elsewhere; and when the morbid action threatens to extend to the body, timely amputation of a portion of the organ—necessitated by certain indications manifesting themselves beyond the seat of inoculation—at once checks it.

Protective inoculation can be resorted to with great advantage when a district or country is invaded by the disease, and slaughter of all the cattle therein would prove a serious calamity. Even in the case of valuable herds, when the disease has only attacked one or two animals, and it is of great importance that its extension should be checked and the remainder of the cattle saved, there is good reason for the adoption of the measure; though the "stamping-out" method, entailing the slaughter of all, has its advocates. These urge the danger of allowing cattle to live which may, through contact with the sick, have only a small portion of lung involved, present no symptoms, are inoculated, and so are supposed to be safe to place among others, while all the time they are capable of infecting. This is really the danger attending the practice of inoculation, a danger not easily avoided, because of the difficulty of thoroughly exploring the thoracic cavity of the ox, owing to the thick skin and parietes, and the unfavourable position of the animal for examination.

There seems to be no danger of infection from cows during the inoculation period, no reliable evidence having been adduced that this operation tends to spread the disease, or to maintain it in districts where it is prevalent. On the contrary, there are numerous instances recorded in which the extension of the scourge in a cowshed has been stopped in a few weeks after inoculation has been practised, and the inoculated cattle have resisted subsequent infection under the most favourable conditions for receiving it. Holland has been freed from lung-plague by energetically slaughtering the diseased and inoculating the unaffected, and France has adopted the same course. In this country no experiments of a public kind have been instituted to set at rest the value of protective inoculation for this malady, and notwithstanding strong evidence in

its favour, its adoption is strongly opposed by those who favour the expensive, but thoroughly effective, plan of wholesale slaughter of the sick and suspected, the latter including all the cattle which have been directly or indirectly in contact with the former.

PHTHISIS IN THE ARMY.

AT the Statistical Society on Tuesday evening a paper was read by Robert Lawson, Esq., LL.D., Inspector-General of Hospitals, on the Mortality among Troops serving in the United Kingdom from Consumption. After stating the sources from which the rates of mortality from phthisis in the army and in civil life respectively were obtained, the author showed in a tabular form the ratio of deaths in civil life from this disease at five periods of life between seventeen and forty-five in the five years 1838-42 and the seven quinquenniads 1850-84. The decrease in the mortality from phthisis in the later periods he considers to be mainly attributable to hygienic measures, and perhaps to some extent also to more successful medical treatment. In making a comparison of the death-rates in the army with those in civil life, the author pointed out the necessity of adding to the military deaths a certain proportion, which he shows reason to estimate at one-half, of the men discharged the service in each year on account of consumption. Calculating the ratio of deaths upon the numbers living, and bringing it into comparison with the proportion which would have occurred in civil life in a population with the same age distribution as the army, the following results were obtained:—

Periods.	Phthisis in army at civil rates.	Phthisis observed.		
		Deaths.	Half of discharges.	Total deaths.
1837-46	5·09	8·53	0·85	9·38
1860-64	3·63	3·07	2·70	5·77
1865-69	3·81	2·57	2·26	4·83
1870-74	3·39	2·43	2·21	4·64
1875-79	3·21	2·45	2·22	4·67
1880-84	2·70	1·92	1·71	3·63

The actual reduction in the deaths among the troops in the latter as compared with the first period is to some extent due to increased facility of invaliding phthisical cases; but with the correction made by Dr. Lawson there is still a marked progressive diminution to the extent of about three-fifths. The table, however, shows clearly that "at every period mentioned service in the army was attended by greater mortality from phthisis than would have been met with among men of the same age exposed to the ordinary causes of that disease in civil life." Dr. Lawson questions the opinion held by many of the medical officers that this decrease was to any great extent attributable to improved ventilation in barracks. He believes it to have been much more in consequence of removing a considerable number of the troops from the towns in which they were quartered to camps at Aldershot, Shorncliffe, Colchester, and the Curragh, and to an improvement in their clothing by the adoption of woollen shirts for linen or calico. He also considers the abolition of white trousers and the substitution of woollen material for them to have exercised a beneficial influence. Dr. Lawson pointed out that the mortality from consumption has decreased also among the troops in the colonies, with the exception of Mauritius and Ceylon. In a subsequent table it was shown that while so marked a decrease occurred in the general death-rate among troops at home, it was greater in deaths from phthisis than from other diseases. Instead of the former—as in 1837-46—constituting 52·3 per cent. of the whole, in 1880-4 they only amounted to 43·8 per cent.

In the discussion that followed, Dr. Longstaff, Captain Douglas Galton, Dr. Marston, Dr. Dickson, Dr. Lloyd, R.N., and others took part.

Dr. Longstaff's criticism mainly bore upon the differences between the military and civil portions of the community, rendering comparisons between them difficult, and, as affecting the statistical deductions, unreliable.

Captain Galton spoke of what had been done in effecting sanitary improvements in barracks since the time of Lord Herbert, and dwelt upon the fact that there was a great diversity in regard to these in different barracks, and even in different portions of the same barrack, rendering it difficult to gauge exactly their effect on the soldier's health.

Dr. Marston adverted to the large prevalence of ophthalmia in the army twenty-five or thirty years ago; the amount of inefficiency and invaliding it caused then as compared with the practically insignificant amount of the same disease now; and he urged that this could only have been due to the removal of a main factor in its production—viz., the effects of overcrowding and imperfect ventilation. Clothing might fairly be estimated as a cause of disease. He likewise called attention to the prevalence of pulmonary disease among the crews of ironclads years ago, and to the prejudicial effect of crowded and badly ventilated buildings in causing these diseases, as proved by his experience in India and Afghanistan. He traced the operation of the same factor in affecting the incidence and prevalence of epidemic disease generally, and cited some illustrations.

Dr. Dickson and Dr. Lloyd, R.N., followed, and Dr. Lawson in his reply, after meeting Dr. Longstaff's criticism, explained, in effect, that owing, no doubt, to the difficulty of grasping the points in a statistical paper of this kind some misapprehension had arisen. He did not at all depreciate the effect of sanitary improvements, but he had endeavoured to point out some of the directions in which these had operated that had not hitherto received due attention.

BRITISH MEDICAL BENEVOLENT FUND.

THE annual general meeting of subscribers to this Fund was held on Monday, Jan. 10th, at 34, Seymour-street, Portman-square, the residence of the treasurer, at 4 P.M., when the chair was taken by Dr. Jonson, chairman of the committee, in the unavoidable absence of the President, Sir George Burrows, Bart.

The financial statement was submitted and the annual report of the committee read, from which it appeared that the donations during 1886 had amounted to £869 5*s.* 6*d.*, subscriptions to £1228 9*s.* 5*d.*, exclusive of £226 3*s.* 1*d.* contributed from the Jubilee Fund—a total of £2324 3*s.*, which shows an increase over the receipts of 1885 of nearly £300. The disbursements during the year had been, in grants to 183 applicants, £2128; in annuities distributed amongst 61 old people, all over sixty years of age, £1074. The cost of collection and distribution of this large sum (over £5500), minimised though it is by the fact that the officers are all honorary (with the exception of the collector), amounted to £130, including stationery, collector's commission, the printing and postage of the report (of which a copy is sent to each subscriber), the postage and other expenses of the secretaries for finance and cases, and the postal and incidental expenses connected with the distribution of over £3200 in weekly or monthly instalments, which is a peculiar characteristic of this Fund, carried out by means of the Cheque Bank, and by Dr. Jonson as regards the annuities. The distribution of grants is entrusted to the various honorary local secretaries, when it can be done without imposing too irksome a burden upon those gentlemen who so kindly undertake that duty. The number of applicants for grants was 209, of whom 183 (an excess of two over the number relieved in any previous year) received sums varying from £5 to £20, and many of those inadequately relieved would have been given larger grants, had the sum in the hands of the committee been larger. Personal inquiry proved dire and distressing want in many instances amongst those who had been brought up in comparative ease and comfort, and who, by the death of the bread-winner, found themselves dependent upon charity for the common necessaries of life. If this applies to the case of those in receipt of grants, how much more must it occur in the cases of those who, in addition to want of money, are suffering from the weight of years. Of such, the list of annuitants affords many an example, and well shows the infinite good wrought by this charity. The celebration of the Jubilee Year by a banquet in July, under the presidency, and aided by the distinguished advocacy, of Sir James Paget, including a donation of £100 from Her Majesty the Queen, resulted in the addition of £3000 to the funded property from which the annuity payments are derived. This splendid addition will allow of the creation of new

annuities and a consequent relief to the donation or grant department.

Dr. Brett of Watford joined the Committee of Management, in the place of the late Dr. Harvey Kowen, a liberal contributor during his lifetime, and the generous donor of a legacy of £500. The names of Dr. Coates of Bath, Dr. Matthews Duncan, and Dr. R. Quain were added to the list of Vice-Presidents of the Fund, in recognition of their liberality.

THE ERASMUS WILSON BEQUEST.

THE following memorial, to which we alluded last week, has been addressed to the President, Vice-Presidents, and Council of the Royal College of Surgeons of England:—

GENTLEMEN,—We, the undersigned, being informed that a legacy of a considerable amount has been bequeathed to you by the late Sir Erasmus Wilson for the benefit of the College, and presumably for the advancement of science, beg respectfully to direct your attention to the need of support of those collateral branches of medicine which can only flourish by liberal pecuniary aid. We would, therefore, suggest to you the desirability of founding an institution under the direction of the College which shall have for its object "physiological and pathological research." The want of such an institution in England has long been felt, and more especially of late, when we have had to look to Berlin for information respecting tubercle and to Paris for experiments on the prevention of hydrophobia. It is a national discredit that we have nothing in London like the splendid laboratories which exist not only in the capital cities of Europe, but in comparatively small towns, such as Bonn, Strasburg, and Leipsic. There is little prospect of the Government establishing such an institution, or of its being founded by public subscription; the only hope of its foundation lies in the possible bequest of a large sum of money to be devoted to scientific uses. An opportunity has now occurred which has put it in the power of the College to carry this into effect, an opportunity which if now lost may never recur. The foundation of an institution of this nature would tend to raise England to the scientific position held by France and Germany, would create a body of men anxious to devote themselves to scientific work, would be in accord with the best wishes of the donor, and would place the Royal College of Surgeons of England amongst the foremost institutions of Europe. The President and Council would be adding much to their honour if, when an endeavour is being made to strengthen the Empire by a consolidation of the colonies, they founded an institute in the mother country which should draw to it students from all parts of Her Majesty's dominions.

We remain, gentlemen, yours obediently,

John Eric Erichsen, F.R.C.S.; J. Hughlings Jackson, M.D.; Sir Henry Thompson, F.R.C.S.; Sir J. Fayrer, K.C.S.I., M.D.; David Ferrier, M.D.; Sir William W. Gull, Bart., M.D.; W. Watson Cheyne, F.R.C.S.; Francis Galton, M.A.; Geo. H. Savage, M.D.; George Pollock, F.R.C.S.; Sir Jas. Risdon Bennett, M.D.; P. H. Pye-Smith, M.D.; John Simon, C.B., F.R.C.S.; E. Klein, M.D.; Sir Henry W. Acland, K.C.B., M.D.; George J. Romanes, F.R.S.; F. W. Pavy, M.D.; W. H. Flower, F.R.S.; Sir Andrew Clark, Bart., M.D.; Sir W. Bowman, Bart., F.R.S.; Richard Quain, M.D.; Gerald F. Yeo, M.D.; George Fleming, LL.D.; W. H. Broadbent, M.D.; Thos. Stevenson, M.D.; Victor Horsley, F.R.C.S.; Sir Edward H. Sieveking, M.D.; T. Lauder Brunton, M.D.; E. A. Schäfer, M.R.C.S.; W. Withers Moore, M.D.; Robt. Cory, M.D.; H. N. Moseley, F.R.S.; E. Ray Lankester, F.R.S.; R. Brudenell Carter, F.R.C.S.; Charles E. Groves, F.R.S.; Thomas H. Huxley, F.R.C.S.; Arthur Gamgee, M.D.; John Tyndall, F.R.S.; Sir John Lubbock, Bart.; Jos. D. Hooker, F.R.S.; W. T. Thiselton Dyer, F.R.S.; Shirley F. Murphy, M.R.C.S.; M. Foster, M.D.; J. Burdon Sanderson, M.D.; Charles S. Roy, M.D.; Francis Darwin, M.B.; Hugo Müller, F.R.S.; J. N. Langley, F.R.S.; W. H. Corfield, M.D.; W. H. Gaskell, M.D., Donald MacAlister, M.D.; Samuel Wilks, M.D. (The last-named gentleman acted as secretary.)

The memorial was, as we announced last week, referred to the committee on the question as to the disposal of the funds received under the will of Sir Erasmus Wilson.

HEALTH OF THE METROPOLITAN POLICE.

SIR CHARLES WARREN states the "authorised strength on Dec. 31st, 1885," to have been 13,319, but nowhere in the report is the average strength throughout the year given. Of this strength, 12,586 were employed in the metropolitan divisions, and 733 in the dockyards and military stations of Woolwich, Portsmouth, Devonport, Chatham, and Pembroke. The Chief Surgeon reports that "the total number of separate individuals who were on the sick list during the year 1885" was 6328, but he does not state how many cases occurred, nor does he give any information respecting the diseases from which the men suffered or the number constantly off duty on account of sickness. There were 204 men admitted into general or special hospitals, and 20 into naval hospitals during the year, but there is nothing to show whether these were included in the number stated above. The deaths amounted to 66, of which 16 occurred in hospitals; 1 man shot himself, 1 was drowned, 1 was killed by accidentally falling downstairs, and 3 died from fractures, in one case complicated with delirium tremens. The proportion of deaths to strength for the whole force was 4·96 per 1000; only one of the deaths occurred among the men employed in the dockyards. The death-rate in the metropolitan divisions was 5·16 per 1000 of strength, a ratio which compares favourably with previous periods. In the five years 1852-6, it amounted to 7·6, or excluding deaths from cholera, which was epidemic in 1853–4, to 7·4 per 1000, and in 1880 it was 6·4 per 1000. Of the 65 deaths in the metropolitan divisions, 31 were caused by pulmonary diseases, being in the ratio of 2·46 per 1000 of the strength, and lower than in either of the two previous periods. The men removed from the force on account of being "incapacitated by sickness or long service" amounted to 222, or 16·67 per 1000. This is very much below the proportion returned as "invalided" in previous reports, having been 35 in 1852–6 and 25 in 1880; but there may probably be some difference in the mode of recording the discharges at these different periods. In the present return the cause of invaliding is stated in only 163 cases; 44, or upwards of one-fourth, were assigned to rheumatism, rheumatic gout, and sciatica; 22 to long service, age and debility; and 16 to pulmonary diseases. So far as we can judge from the information afforded by the returns, the health of the force has been very satisfactory.

THE PARKES MUSEUM.

THE annual report of this institution, which was presented at the general meeting in December, shows conclusively that the work which is being done by the museum is of a kind calculated to be of great utility to the public. Since its inception, now nearly eleven years ago, the annual records of the work done have none of them, we think, equalled the record of 1886 for real solidity in its accomplished facts. Early in the year 1886 it was suggested that a course of lectures should be given intended to meet the requirements of persons desirous of qualifying for such offices as that of inspector of nuisances, &c. No difficulty was found in arranging these lectures. Professors de Chaumont, Corfield, Robinson, Messrs. Eassie, Percy, Boulnois, Shirley Murphy, Wynter Blyth, Sykes, and Cassal each expressed their readiness to help by delivering one or two lectures intended to form part of a coherent course, and it is no wonder that with such a well-qualified staff the lectures became popular. A fee of 5s. was charged, with the result that some sixty persons attended the course; and when, as was necessary, the course was repeated in the autumn, seventy-five persons were found who were eager to pay the small fee and listen steadily to the instruction offered. This is work of the right kind, and work which, as we have said above, must benefit the public. The lectures are admirably calculated for the audiences to which they are delivered, and the museum affords abundance of material with which to illustrate them. In lectures such as these the museum finds its true mission. The collection is not one calculated to attract the public at large, and it is obvious that the person who is ignorant in sanitary matters would fail to appreciate the exhibits, many of which are of a very technical character. When, however, the lecturer

and the museum collection become mutually complementary to each other the value of each is enormously increased.

The ordinary lectures to the members were well attended. Most of the recognised teachers of hygiene brought their classes to the Museum for practical instruction.

The library, we are told, has been enriched during the past year by 450 books and pamphlets, and the card catalogue is completed, so that the work of reference is easily carried on. Those of our readers who issue annual reports on sanitary subjects would do well to remember the importance of sending such reports to this central library devoted to sanitation, which is yearly becoming of more and more importance.

The lectures for the ensuing year are to be given, not as heretofore in the evening, but at five in the afternoon—an hour which it is hoped may prove convenient to the majority of members and their friends. The first lecture is arranged for Thursday next, Jan. 27th. The lecturer is Mr. Ogle Tarbotton, M.Inst.C.E., and the subject is "Engineering and Architecture in relation to Sanitary Science." Captain Douglas Galton, F.R.S., will occupy the chair.

ADULTERATION OF FOOD AND DRUGS ACT.

A SPECIAL general meeting was held on Jan. 12th at the Lecture-room of the Sheffield Pharmaceutical and Chemical Society, Norfolk-row. The meeting was called "to consider the recent ruling at Sheffield Town Hall under the 'adulteration of Food and Drugs Act.'" The chair was occupied by the President, Mr. Newsholme, and there was a large attendance, the room being almost filled.

The Chairman proposed the first resolution, which was as follows: "That this meeting, specially convened, views with alarm the recent decision of the Sheffield stipendiary magistrate 'that a preparation containing *any* opium and *any* alcohol whatever may be legally sold as tincture of opium'; and this meeting is of opinion that if this be upheld as legal, and is acted upon, it is likely to interfere dangerously with uniformity and with the public safety. It would further affirm that the only tincture of opium acknowledged generally by the trade is that of the British Pharmacopœia."

The resolution was carried unanimously, as was also the following:—

Moved by Mr. Ward, F.C.S.: "That this meeting expresses also its astonishment at the judgment recently given with respect to paregoric, that any preparation of a soothing nature may be sold under that name. It holds that the fact of two or more dissimilar prepartions having the same name is so dangerous to public health that it is desirable the Pharmacopœia Committee should adopt, as a synonym of the compound tincture of camphor of the Pharmacopœia, that which is commonly known as paregoric, paregoric elixir, and elixir paregoric."

Moved by Mr. Preston: "That this meeting desires to point out its determination strictly to conform to the British Pharmacopœia as binding upon it, in accordance with the Order in Her Majesty's Privy Council made respecting thereto."

This resolution was carried almost unanimously, and a vote of thanks to the Chairman concluded the meeting.

ST. ANDREWS GRADUATES' ASSOCIATION.

ON Friday afternoon last, Mr. Balfour, Secretary for Scotland, and his colleague, the Lord Advocate, received a deputation of the St. Andrews Graduates' Association at Dover House, Whitehall. The memorial, signed by 789 graduates of the University, urged that an endowment be found for two additional professors—viz., a Professor of Anatomy and a Professor of Botany, so that the University may be enabled to give two *anni medici* to medical students attending the University. After completing their two years' course of preliminary and theoretical study, they could go for practical and clinical work to any of the great hospitals of the United Kingdom most convenient to them; they could then return to the University and submit themselves to examination, and thus obtain graduation and a licence to practise their profession. Dr. B. W. Richardson, President of the Association, Sir J. Crichton Browne, Surgeon-General Gordon, and Dr. Hicks, F.R.S., spoke in support of the memorial. Mr. Balfour and the Lord Advocate, in reply to the deputation, assured them that the ancient University of St. Andrews was secure of the good-will of Her Majesty's Government, and that the memorial itself and the arguments in support of it would receive due attention. They also intimated to the deputation that evidence upon the matter set forth in the memorial would be received by the Commission about to be appointed to inquire into the constitution and endowments of the Scottish Universities, and the deputation agreed to furnish this evidence to the Commission. A cordial vote of thanks to Mr. Balfour and to the Lord Advocate for their courtesy and attention was then proposed and carried unanimously.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5856 births and 4263 deaths were registered during the week ending Jan. 15th. The annual death-rate in these towns, which had increased in the preceding four weeks from 20·7, to 26·5 per 1000, declined again last week to 24·1. During the thirteen weeks of last quarter the death-rate in these towns averaged 20·3 per 1000, and was 2·1 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 17·4 in Portsmouth, 19·3 in Bradford, 19·3 in Sunderland, and 19·8 in Oldham. The rates in the other towns ranged upwards to 30·4 in Cardiff, 30·8 in Blackburn, 31·0 in Manchester, and 31·6 in Wolverhampton. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 537 and 475 in the preceding two weeks, were last week 485; they included 195 from measles, 95 from whooping-cough, 82 from scarlet fever, 48 from "fever" (principally enteric), 34 from diarrhœa, 31 from diphtheria, and not one from small-pox. These zymotic diseases caused the lowest death-rates last week in Brighton, Portsmouth, Nottingham, and Bolton; and the highest rates in Leeds, Sunderland, and Huddersfield. The greatest mortality from measles occurred in Liverpool, Wolverhampton, Newcastle-upon-Tyne, Halifax, Leicester, and Leeds; from whooping-cough in Bristol, Plymouth, Preston, Sunderland, and Huddersfield; from scarlet fever in Norwich, Bristol, Manchester, Blackburn, Sheffield, and Sunderland; and from "fever" in Birkenhead and Plymouth. The 31 deaths from diphtheria in the twenty-eight towns included 18 in London and 5 in Birmingham. Small-pox caused no death in London and its outer ring, or in any of the twenty-seven large provincial towns. Only 2 cases of small-pox were under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease. The deaths referred to diseases of the respiratory organs in London, which had increased in the preceding four weeks from 416 to 731, declined again last week to 591, but exceeded the corrected average by 89. The causes of 107, or 2·5 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Cardiff, Birkenhead, Derby, and Plymouth. The largest proportions of uncertified deaths were registered in Sheffield, Halifax, and Huddersfield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 25·1 and 29·9 per 1000 in the preceding two weeks, declined again to 26·1 in the week ending Jan. 15th; this rate exceeded, however, by 2·0 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 16·4 and 18·0 in Greenock and Leith, to 30·9 in Glasgow and 33·3 in Paisley. The 652 deaths in the eight towns last week showed a decline of 94 from the number in the previous week, and included 26 which were referred to whooping-cough, 13 to scarlet fever, 10 to measles, 10 to diarrhœa, 7 to "fever" (typhus, enteric, or simple), 5 to diphtheria, and one to small-pox; in all 72 deaths resulted from these principal zymotic diseases, against 63, 73, and 94 in the preceding three weeks. These 72 deaths were equal to an annual rate of

2·9 per 1000, which was 0·2 above the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 15, 21, and 27 in the previous three weeks, were last week 26, of which 18 occurred in Glasgow, 4 in Edinburgh, 2 in Aberdeen, and 2 in Paisley. The 13 deaths from scarlet fever corresponded with the number in the previous week, and included 8 in Glasgow and 5 in Edinburgh. The 10 deaths attributed to diarrhœa showed a decline of 8 from the number in the previous week; 5 were returned in Glasgow and 2 in Edinburgh. All the 10 fatal cases of measles occurred in Glasgow. The seven deaths referred to "fever" corresponded with the number in the previous week; and included 2 in Glasgow, 2 in Greenock, and 2 in Paisley. The 5 fatal cases of diphtheria showed a decline of 12 from the numbers in the previous week; 4 were returned in Glasgow. The death referred to small-pox was a fatal case of chicken-pox in Glasgow. The deaths from acute diseases of the respiratory organs in the eight towns, which had been 179 and 213 in the preceding two weeks, declined again last week to 181, but exceeded the number in the corresponding week of last year by 36. The causes of 86, or more than 13 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 38·0 and 31·3 per 1000 in the preceding two weeks, rose again to 36·2 in the week ending Jan. 15th. During the thirteen weeks of last quarter the death-rate in the city averaged 26·7; the mean rate during the same period did not exceed 18·8 in London and 19·5 in Edinburgh. The 245 deaths in Dublin last week showed an increase of 33 upon the number returned in the previous week, and included 8 which were referred to scarlet fever, 7 to diarrhœa, 4 to "fever" (typhus, enteric, or simple), 2 to whooping-cough, and not one either to small-pox, measles, or diphtheria. Thus the deaths from these principal zymotic diseases, which had declined in the preceding five weeks from 23 to 13, rose again last week to 21; they were equal to an annual rate of 3·1 per 1000, the rates from the same diseases being 2·3 in London and 2·4 in Edinburgh. The fatal cases of scarlet fever, which had been 11 and 6 in the preceding two weeks, rose again last week to 8; the deaths from diarrhœa and diphtheria also showed an increase upon the numbers in the preceding week; while those from "fever" showed no variation. The deaths both of infants and of elderly persons showed a considerable increase upon the numbers in the previous week. Five inquest cases and 5 deaths from violence were registered; and 82, or more than a third, of the deaths occurred in public institutions. The causes of 41, or more than 16 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

INDIA OFFICE.—The Queen has approved of the following promotions made by the Governments in India:—Surgeon-Major James Hunt Condon, M.D., of the Bengal Medical Establishment, and Surgeon-Major Edward Sexton, M.D., of the Bombay Medical Establishment, to be Brigade Surgeons.

ADMIRALTY.—The following appointment has been made: Surgeon Ernest Apthorpe, to the *Bullfrog*.

RIFLE VOLUNTEERS.—1st Dumbartonshire: Acting Surgeon William Mackie resigns his appointment.—1st Elgin: Acting Surgeon D. Hardie resigns his appointment.

THE CROYDON SEWAGE FARM.—The Beckenham Local Board have given instructions for an injunction to be applied for to restrain the Croydon corporation from continuing to use their sewage farm at South Norwood. It is alleged that the farm causes an intolerable nuisance, and is prejudicial to the health of the locality. The Beckenham board will, it is stated, probably be joined in the application by other adjacent local authorities.

PERILS OF JUVENILE PARTIES.—It is stated that after a juvenile ball given by a well-known Spanish nobleman, seventeen of the children who had been present were found to be suffering from measles, one of the little guests having only just been convalescent from that affection.

Correspondence.

"Audi alteram partem."

"FEVER CASES IN GENERAL HOSPITALS."

To the Editors of THE LANCET.

SIRS,—In your short article, on page 83 of your issue dated 8th inst., approving the decision of the governors of the Sussex County Hospital, situated in the borough of Brighton, to exclude in future cases of typhus, scarlatina, and measles (small-pox is already proscribed) from the hospital, you do not appear to have been fully informed as to the ample provision which has been made by the Corporation for the isolation and treatment of these and other infectious diseases. Will you, therefore, allow me to supplement this deficiency, and to put your readers in possession of the cardinal facts relating to the question.

About six years ago the Town Council—which is the sanitary authority of the borough—purchased ten acres of ground to the north of the town or on the Downs, well removed from all human habitations, and in due course proceeded to erect thereon a commodious sanatorium at a cost of about £13,853, so arranged and divided as to enable the sanitary committee, assisted by the health officer, to cope not only with the ordinary, but also with any extraordinary, demands that might be made upon its resources. The administration block provides accommodation for the physician, matron and steward, nurses, and female servants. The numerous wards and the convalescent rooms can be separately heated at any moment, and maintained at any temperature required. The ventilation is unimpeachable. The arrangements are such that each form of contagious disease can be effectually quarantined from all other types. The sexes are also separated. So that there are two wards assigned for each variety or type of fever, each being equipped with its own nursing establishment and other necessary appointments. Any of these compartments can be fumigated and disinfected with ease; and, as a matter of precaution, this is repeatedly done to make assurance doubly sure. The disinfecting apparatus is open for the use of the public as well as for that of the inmates of the sanatorium. There is an efficient laundry. Telephonic communication exists with the porter's lodge, the Town Hall, and one of the police stations. For the extinction or limitation of fire, hydrants have been fixed, and are periodically inspected and reported upon, like others in the town, to the Watch Committee. A Lewis hand fire-extinguisher is suspended in every ward.

From the foregoing summary, it will be gathered that, as regards the town of Brighton, the quarantine afforded is all that can be desired. The public are still further protected by the employment of an ambulance for the transport of patients and their infected clothing &c., and by its thorough disinfection after being used. The risks involved in conveying in cabs persons suffering from infectious disease are thus avoided. As regards the different kinds of fever, the segregation on the spot, and the periodical purifications of the wards &c., are about as perfect as they can be made.

During the meeting of the British Medical Association here in August last, the hospital was visited by a large number of medical practitioners and health officers, who, without exception, accorded to its management and organisation their full and unqualified approbation. Then there were only four patients. The numbers have seldom exceeded, at any time, a very minute tithe of those for whom provision can be made at the shortest notice. But, seeing that Brighton has occasionally suffered from want of a refuge of this description, the Corporation, in the exercise of the sanitary powers vested in them, have doubtless acted wisely and well, in providing, on a large and liberal scale, readily admitting of much elasticity either in the direction of expansion or contraction, for every emergency.

The commissioners of the adjoining town of Hove have lately opened their splendid Sanatorium which, with the ground, it is believed, cost about £10,000. It is placed at a safe distance, and convenient enough to Aldrington and Portslade—both rising and growing communities; and it may probably be eventually utilised by the inhabitants of these places as well as by those of Hove.—Yours truly,

JOSEPH EWART, M.D.,
Chairman of the Sanitary Committee,
Brighton Town Council.

Brighton, Jan. 14th, 1887

THE PROVIDENT PRINCIPLE AND THE MEDICAL PROFESSION.

To the Editors of THE LANCET.

SIRS,—In condensing into a single paragraph in your leading article in THE LANCET of to-day the proposals for united action between hospitals, general and special, and dispensaries, provident or otherwise, in each district of London, contained in my Sturge Prize Essay, you do, I think, some injustice (quite unintentionally, I am sure) to an idea for which I lay no claim of originality, it having been expressed in both the other successful essays, and possibly in many others of the seventy or eighty which were not successful. The following passage will place the matter before your readers in its true light:—

"If the managers of hospitals desire, as no doubt they do, to have their incomes increased in proportion to the needs of an enormously increased and still increasing London, they must be prepared to abandon the policy of isolation which leads each institution to appeal for itself alone, and to act as if unconscious of the presence of other medical charities in its neighbourhood. The union, for certain purposes, of a group of general and special hospitals and dispensaries in each district of London is to be advocated on many grounds, not the least of which is that it would greatly facilitate the making of effective appeals for funds in a systematic manner. It would also render it easier for the public to distinguish between useful and useless charities, and for hospital managers to compare the different modes of keeping hospital accounts, and of making appeals to the public, with the object of securing the general adoption of what seemed to be the best. It would be almost a necessary preliminary to the systematic workshop collections advocated above, as it would render it possible to offer subscribers the option of going to any of the united medical institutions in their district. A further step in advance would be the union of these various groups under one council with a central office."

I must not trespass on your space so far as to explain what are the "systematic workshop collections" mentioned in this passage, but I shall be happy to send a copy of the essay to any of your readers interested in the subject.

I am, Sirs, yours faithfully,

Southville Park Villas, Jan. 15th, 1887. H. NELSON HARDY.

THE MEDICAL REGISTER.

To the Editors of THE LANCET.

SIRS,—With reference to my communication as to the registration of the diploma of Member of the King and Queen's College of Physicians in Ireland, and the degree of Master in Obstetrics of the Universities, which appeared in THE LANCET of Dec. 25th, I have since that time been engaged in correspondence with the English and Irish Offices of the Medical Council as to the refusal of the Registrar of the Branch Medical Council for Ireland to carry out Clause 20 of the Medical Act, 1886. The result is that these qualifications are now registrable in England, Ireland, and Scotland, and I understand that those already on the Register can have these additional qualifications appended to their names in the Register for 1887 by making application to the Registrar for Ireland during the next week or ten days.

I am, Sirs, yours &c.,

Dublin, Jan. 13th, 1887. C. FREDK. KNIGHT, M.D.

"SCHOOL-MADE CHOREA."

To the Editors of THE LANCET.

SIRS,—Having a year or two ago acted for twelve months as honorary correspondent to one of the largest Board schools in London, I have read with much interest in THE LANCET of last week Dr. Sturges' contribution and the leading article upon the subject of school-made chorea.

Dr. Sturges clearly makes out two points. First, that by neglect of the temperament of children chorea is sometimes caused by the mere distress of uncongenial work. Secondly, that when chorea has just begun in a child it often remains unnoticed, and so becomes much exaggerated by school work. The remedy for the first grievance will, I am afraid, remain far distant so long as the present system of forcing children through certain standards, irrespective of their inclination and capabilities, prevails. The second complaint, that of the neglect of commencing chorea, is only a small part of a very wide evil. The commencement not only of chorea, but of all diseases, is neglected in Board schools. No place affords so good an opportunity of studying the different stages in the development of permanent squint than a large infants' Board school. Here, also, children may be seen "growing out of" rickets, and so on. Most of us will also remember the sad case of the child who died of meningitis a few days after he had received a blow on the head for being stupid. The remedy for this state of things is obvious. What is required is a skilled medical inspection of Board schools. It is useless to trust, as at present, to the unskilled and preoccupied observations of the teachers. The Board at present has an expensive organisation for driving children into the schools, but no provision is made to ensure that the children so driven in are fit to go to school. It seems incredible that an institution such as the School Board, whose very existence depends on the value of training, should trust their pupils' health to unskilled hands. I trust that all this will soon be changed; but the change will be brought about only by the calm display of facts, such as appears in Dr. Sturges' article.—I am, Sirs, your obedient servant,

London, Jan. 1887. THOS. GLOVER LYON.

RELATION OF PHTHISIS TO OVARIAN CYSTIC DISEASE.

To the Editors of THE LANCET.

SIRS,—In reference to Dr. Bailey's case narrated in your Clinical Notes of last week's issue, I would, firstly, venture to congratulate him on his accurate diagnosis and successful treatment of a most difficult case, and, secondly, I would thank him for the information he kindly gives me on the point of the relation between phthisis and ovarian cystic disease, for which I am the more grateful because it is *not* confirmatory of the common family history of consumption. But he mentions a fact which strongly supports the theory I ventured to propound, that ovarian cysts were caused by a family tendency to early tissue degeneration. Dr. Bailey says "the patient's parents were first cousins," and how marriages of consanguinity tend to the enfeeblement of the offspring in a great majority of cases is well known. But I feel still more grateful to Dr. Bailey because many professional brethren have most kindly and courteously sent me family charts or particulars of cases in which ovarian cysts and phthisis were existent markedly in the same family, but hitherto no one has favoured me with notes of a case occurring in a member of a healthy family. Such, of course, we know do happen, and I have tried to show the importance of knowing *why*.—Yours faithfully,

West-street, Finsbury-circus, Jan. 17th. BEDFORD FENWICK.

A "NEW" METHOD OF EXCISING THE KNEE-JOINT.

To the Editors of THE LANCET.

SIRS,—I at the earliest opportunity most frankly acknowledge that the operation I thought to be my own has previously been suggested and performed by Professor Ollier. I also tender my sincere thanks to Mr. Keetley for referring me to Professor Ollier's paper in the *Revue de Chirurgie*, which I had never seen before this day. The merits of the operation I submit should in fairness be left to future clinical experience. I am, Sirs, yours truly,

Jan. 19th, 1887. HERBERT ALLINGHAM.

DEGREES FOR LONDON MEDICAL STUDENTS.

To the Editors of THE LANCET.

SIRS,—With regard to your paragraph in THE LANCET of Jan. 15th, stating that the students of St. Mary's Hospital were the first to express a collective opinion on the scheme of the conjoint Colleges for granting an M.D. degree, I think it is only right to say that on Nov. 25th, 1885, at a meeting of the University College Medical Society, attended by over one hundred students, Dr. Thomas Barlow being in the chair, an almost identical resolution to that approved by the students of St. Mary's Hospital was passed, after a long and animated discussion.—Yours truly,

J. WALTER CARR, M.B., B.S.,
President, Univ. Col. Medical Society.

University College Hospital, Jan. 16th, 1887.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

THE NEWCASTLE INFIRMARY.

THE special committee appointed by the governors of the Newcastle Infirmary two months ago have completed their labours and have adopted their report for presentation to the governors. The report is a very voluminous one, and at the same time critical as regards the financial position and past management of the institution. The ground it covers may be inferred from the fact that it fills nearly five columns of our daily papers here, so that I can only give you a condensation of it in this letter. The committee, in dealing with the question of admission of patients, recommend the institution of a ward for those who can pay a whole or part of the expense incurred by their keep. They point out that at present there is much overlapping of the medical charities of the city, and, for instance, recommend the removal of children, except in some surgical cases, to the new children's hospitals at Newcastle and Gateshead when these institutions are ready to receive them. As regards expense, under the head of stimulants they point out that it is in excess of all other institutions with which comparison has been made, with one exception, and they think that it ought to be capable of a reduction of at least 10s. per bed per annum, which would effect a saving of £117 on this head. In reference to the very large expense of one article of diet for the sick—viz., £747 last year for beef-tea alone,—they suggest that a better and cheaper beef-tea could be made by proper cooking. The use of rabbits in place of fowl to some extent is also recommended; and skimmed milk, they think, might be more generally used at the infirmary; also the more general use of oatmeal porridge. The recommendations of the committee as regards beef-tea are to a very great extent borne out by the special analysis of Mr. T. Hatfield Walker, analyst for the city of Carlisle, who states that when beef-tea is intended for enemata it should not be heated above 100° F. Some suggestions are made as to the nursing department, and also as regards saving under the head of antiseptic dressings, an account to be kept of the expense to each bed and to each surgeon, as at Edinburgh. A table is given, showing the number of out-patients and casuals treated in the various medical charities of Newcastle and Gateshead during the year 1885, the total amounting to 75,503. The committee are of opinion that the time has come for abandoning the letter system, and making the infirmary a free institution, and in this they have the unanimous support of the medical board. They further say that the infirmary has long been a school of practical medicine and surgery, and is not the least important factor in the success of the College of Medicine here. The number of pupils entered for the hospital practice at the present time is 115. Of these 38 are full students entered for the complete course of the College, and about 40 are from the metropolitan hospitals. At present the fees are about £1000 per annum, and are at the disposal of the honorary physicians and surgeons, with some small deductions for the infirmary library, &c. The committee think that, without interfering with the fees charged for pure clinical instruction, a charge of £5 5s. per annum should be made for each student using the infirmary, to be paid to and received by the treasurer for the benefit of the infirmary, and they refer to the custom at Edinburgh in this respect. My own opinion is that Newcastle cannot be compared with Edinburgh for many obvious reasons, and that the charge will be regarded, on the one hand, as a fine on the students, and, on the other, an attempt, and not a generous one, to lighten the pockets of the teachers. Surely £5 5s. per annum is too heavy a fine for a student's attendance at our infirmary, good as it is. I predict that this suggestion will require considerable modification before it is adopted. The committee record an investigation of cases which is of considerable interest. Of 161 cases, 41, or one-third, were reported as venereal. Of 33 cases investigated, 5 were in receipt of £2 per week, 2 had given false addresses, 5 were in receipt of parish relief, and the remaining 21 were persons whose circumstances may be said to have justified their seeking medical relief at the infirmary, though some could afford to make some small payment to a club or provident dispensary. As to venereal cases, the committee recommend that, although only a few male patients had been admitted since 1885, when the lock ward was closed, for the future a stringent rule should be made excluding all such cases, as it is an abuse of the charity to use its funds for this purpose, and they further advise all the other medical charities not to receive them. Here the committee go rather astray, and forget, or are ignorant of, the multitude of cases which spring from this origin, and crowd out eye, throat, ear, and skin hospitals. Besides, if this is strictly carried out at the infirmary, their pupils will pass from its wards very imperfectly equipped with practical knowledge of a very valuable nature. Not very long ago I told you that the question of making the infirmary a free hospital was looming in the not very far distance. This met with an official contradiction. Well, after all, your correspondent was only very slightly in advance of the fact, which is now in a fair way of being accomplished. The committee also recommend the abolition of the casual and out-patients' department, which would effect a saving of £1000 per annum.

Newcastle-on-Tyne, Jan. 17th.

LIVERPOOL.

(From our own Correspondent.)

THE SEVENTEENTH ANNIVERSARY OF HOSPITAL SUNDAY IN LIVERPOOL.

WHEN Hospital Sunday first became an institution here we were favoured with good weather. This continued for years, and it is only recently that the weather has been so inclement. A more unfavourable day than that which marked the seventeenth anniversary could not have been imagined. The result was a great falling off in the attendance at church and chapel, and in most instances a considerable reduction in the sums collected. So strongly has it been felt that many persons were deprived by the weather of the opportunity of showing their interest in the medical charities, that additional appeals were made and offerings collected on the following Sunday, the 16th inst. The total amount of the Sunday collections, as advised to the treasurer up to the 18th inst., amounts to £4074. Many more collections have yet to be returned.

THE HOSPITAL FOR WOMEN.

A meeting of the governors of this charity was held on the 17th to elect a successor to the late Dr. Lupton. On the recommendation of the Committee, Dr. Henry Briggs, M.B. Edin., F.R.C.S. Eng., honorary medical officer to the Ladies' Charity and Lying-in Hospital, was unanimously elected. Dr. Briggs has resided in Liverpool for nearly ten years, during which he has held the offices of senior house-surgeon at the Stanley Hospital, and of resident medical officer to the Royal Infirmary. He has also been demonstrator of anatomy at the Liverpool University College, surgical pathologist, tutor in clinical surgery, and chloroformist at the Royal Infirmary. In all these he has won golden opinions both from patients and colleagues, and the governors of the Hospital for Women are to be congratulated on the choice they have made.

THE STANLEY HOSPITAL.

Drs. Costine and Sheldon, the founders of the Stanley Hospital, who have just retired from the positions of honorary physician and surgeon respectively after twenty years' service, were on the 15th inst. presented with their portraits painted in oil, as a mark of the appreciation in which they are held by the medical staff of the hospital. The presentation was made at a dinner given at the Adelphi Hotel, at which Dr. Kellett Smith presided, among the guests being Mr. Edward Whitley, M.P. For the vacancies thus created Dr. Whitford has been elected physician, and Mr. Robert Jones surgeon.

ADULTERATION OF PEPPER.

Dr. Campbell Brown, the city analyst, and Professor of Chemistry in University College, has done a great public service in detecting and exposing the manner in which pepper is largely adulterated, not only in Liverpool, but elsewhere. It would appear that the adulteration consists of the admixture of 15 per cent. of a hard ligneous tissue,

consisting of ground fruit stones, resembling olive stones. It would also appear that a worthless material resembling ground olive stones is imported from Italy, under the name of "pepperette" or "poivrette," for the express purpose of being fraudulently mixed with pepper.

NORTHERN HOSPITAL.

Dr. James Barr was on the 18th inst. elected, without opposition, physician to the Northern Hospital, in the place of Dr. Seaton, recently elected physician to the Infirmary. Dr. Barr is well known for his many contributions to medical literature.

Liverpool, Jan. 20th.

EDINBURGH.

(From our own Correspondent.)

THE LATE LORD IDDESLEIGH.

On Tuesday last the lectures in the University were entirely omitted, as a mark of respect for the late Lord Rector, while in the afternoon a University memorial service was held in St. Giles' Cathedral, synchronously with that in Westminster Abbey, and with the funeral obsequies in Devonshire. In the Cathedral, which was very crowded, there was a large assemblage of the students, amongst whom the late Lord Rector was an especial favourite, and who were eager to pay this last tribute of respect to their twice-elected representative. The general public filled all the remaining space, with the exception of a portion of the chancel, which was occupied by University officials in their robes and insignia of office. The memorial sermon, preached by Dr. Cameron Lees, one of Her Majesty's chaplains, referred to the great loss to the University and to the cause of culture throughout the country occasioned by Lord Iddesleigh's death. A large part of the sermon dealt with the manly and noble character of the late Earl, as evidenced alike in public and in private life. A special service had been prepared for the occasion, containing appropriate selections for the choir, and the whole ceremony was of a strikingly impressive nature.

HEALTH LECTURE FOR THE PEOPLE.

A popular lecture under the auspices of the Health Society was delivered by Professor Stirling of Manchester last Saturday, and was largely attended. The lecturer chose the subject of "Wear and Tear," illustrating the transformation of energy and of material in the animal mechanism by a series of most demonstrative experiments. In an admirable way the physiological facts connected with nutrition and excretion were enumerated, illustrated by conclusive experiments, and correlated with rules for daily living of great practical importance. The demonstration was heartily appreciated by the audience, who could hardly fail to profit by the lucid exposition of the subject supplied by the lecturer.

THE ROYAL INFIRMARY.

A meeting of the contributors was held last Monday, to consider the report of their committee upon the management of the institution during 1886. The report was of a very satisfactory nature, and was unanimously adopted. It shows that in the twelve months 8088 in-patients and 25,500 out-patients have received treatment at the institution; 57 per cent. of the cases were treated in the surgical hospital, 43 per cent. in the medical house. The success of the new special departments for dermatology and throat and ear diseases is also alluded to. During the year a new observation hospital for infectious cases has been added, situated in an isolated part of the infirmary grounds; and, including this addition, the institution can now accommodate 660 inmates. The ordinary expenditure shows a distinct decrease, while the daily average of patients has been larger than in previous years. The committee report in favour of a modification of the bye-laws giving a deliberative as well as a casting vote to the chairman of the Board of Managers, which is not at present the case, an alteration in which all the parties interested concur. Comment is also made upon the thorough and efficient performance of their duties by the present staff, and the yeoman service during so many years rendered by Dr. Joseph Bell, who recently retired from the acting surgical staff of the hospital.

Edinburgh, Jan. 19th.

GLASGOW.

(From our own Correspondent.)

SOUTHERN INFIRMARY.

The proposal to erect a third infirmary in Glasgow, to be placed on the south side of the river, where there is at present no such institution, has taken very definite shape, and may now be said to be fairly before the public. A few years ago the future of the scheme seemed to be absolutely assured by a large legacy left by a wealthy local manufacturer; it turned out, however, when the donor's estate was wound up, that there was no available balance for the proposed infirmary, so that the provisional committee are again appealing to the public for funds. It is proposed to erect only a portion of the buildings in the meantime. Plans for this have been prepared and estimates accepted provisionally. The sum which the promoters aim at raising is £20,000, and of this £8000 have already been secured. Acting in the spirit of "Bart. Rous," whose lines appear in last week's LANCET, the executive committee have approached the Town Council of Glasgow, urging the adoption of the Southern Infirmary scheme by the city as at least one of its methods of commemorating the Jubilee of Her Majesty the Queen. If this rather appropriate suggestion be adopted, and Her Majesty's consent be obtained to name the institution the "Queen's Infirmary," or the "Victoria Infirmary of Glasgow," the project will become fashionable and popular, and will soon have plenty of funds. Certainly no Jubilee memorial could be more fitting than this, or more in accordance with Her Majesty's well-known sympathies. The great need for such an institution has been amply demonstrated. The south side of the Clyde, with a population of about a quarter of a million, mostly of the working class, has not a single infirmary bed, the two existing infirmaries being situated one at the extreme northern and the other at the extreme western end of the city. That these two infirmaries are unable to cope with all the work expected of them is seen in the fact that, after filling every available bed, the average weekly number of suitable applicants waiting for admission was in 1885 no less than forty-eight, and in 1886 it was fifty-two. While that was the average number, the maximum was reached each year in February, being 120 in 1885 and 144 in 1886. Further statistics show that, while Dublin provides one bed for every 157 of her population, and Edinburgh one for every 400, Glasgow has only one for every 700, and even that is obtained here by considerably curtailing the number of cubic feet of air space which it is desirable each patient should have. When these facts have been fairly digested by the wealthy and generous of Glasgow the future of the scheme will be no longer doubtful. Meantime, it is to be hoped that the request to be made to Her Majesty for official recognition of the infirmary may meet with a favourable response.

HEALTH OF THE CITY.

The last annual report on the health of the city shows that in the year 1886 there were 13,099 deaths registered, as compared with 13,486 in the previous year, a decrease of 387, representing an average death-rate of 25 in place of 26 per 1000 living. Since the Public Registration Act took effect there has not been so low a death-rate, except in 1879, when it was 24·5 per 1000. The slow but steady improvement which is taking place in the health of Glasgow is indicated in the following table:—

Mean death-rate	1866-75	30·4	per 1000.
" " "	1876-80	26·7	"
" " "	1881-85	26·3	"
" " "	1886	25	"

For the fortnight ending 1st January, 1887, the deaths were 631, giving a death-rate of 31·5 per 1000. Fevers, especially scarlatina and measles, still prevail to a great extent in Glasgow; but it is satisfactory to note that in the whole city there are only 3 cases of typhus, and they are all in hospital. One of the typhus patients is a medical practitioner. It is many years since a Glasgow medical man was attacked by typhus, yet in times not very remote, say twenty years ago, this was a common occurrence, and many valuable lives were thus lost. The value of these fever hospitals, both to the profession and to the community at large, could not be more clearly demonstrated than by these facts.

Glasgow, Jan. 18th.

DUBLIN.

(From our own Correspondent.)

THE GENERAL MEDICAL COUNCIL.

I AM in a position to state that Dr. William Moore, Physician in Ordinary to Her Majesty in Ireland, has been offered and has accepted the post of Crown nominee for Ireland on the General Medical Council. Dr. Moore has filled numerous offices with distinction, including that of president of the College of Physicians; and deservedly ranks high in the estimation of the public and his professional brethren.

BRITISH MEDICAL ASSOCIATION.

The tenth annual general meeting of the Dublin Branch of the Association will be held on the 27th inst. in the College of Physicians; when the officers and council for the ensuing year will be elected by ballot, and any other necessary business transacted. The President elect (Dr. Grimshaw), will give the annual address.

BONE-SETTERS: A WARNING.

At a recent meeting of the Drogheda guardians, an application was received from Dr. Adrien for a fee for the performance of an operation under the following circumstances. The patient was a fine young man, aged twenty, who had got his arm broken above the elbow by a fall off a cart. He went to a bone-setter, and as a result of his treatment Drs. Kelly and Byrne were called in, and found the man's arm gangrenous from the tight manner in which the bandages had been applied. On taking off the bandages the bones were found to overlap. The only chance was amputation close to the shoulder, which was done by Drs. Adrien and Kelly. The man is not expected to recover.

BARRINGTON'S HOSPITAL, LIMERICK.

This institution seems financially to be in a very low condition, for at a meeting of the governors last week it was stated that the hospital was £748 in debt, £300 being due to the bank, which had refused to honour any further cheques. It appears also that the resident medical officer and other officers and servants have not been paid their salaries for the past two months. Another meeting of the governors will shortly be held, and in the meantime a committee has been appointed to open a subscription list, and so place the institution in a more satisfactory position than at present.

RICHMOND HOSPITAL, DUBLIN.

There were five candidates for the post of physician to this hospital, which had become vacant by the death of Dr. Lyons. The board appointed Dr. O'Carroll, the assistant-physician. There is no salary attached to the appointment.

ASSISTANT MEDICAL OFFICER TO THE DUBLIN METROPOLITAN POLICE.

By the death of Dr. Long, J.P., a vacancy for an assistant medical officer to the Dublin Police arose; and although the emolument of the post was only £75 a year, yet the competition was most keen, and the candidates were, it is said, over fifty in number, and were from all grades of the profession, from the examiner of a university or corporation down to the simple apothecary. I believe Dr. Long had to compound the medicines ordered, but I understand his successor will not be required to do so. The vacancy has now been filled up by the appointment of Dr. Oulton, formerly resident surgeon to the Meath Hospital.

Dublin, Jan. 18th.

MANCHESTER MEDICAL SOCIETY.—The annual meeting of the members of this Society was held on the 12th inst., Dr. J. Hardie, president, in the chair. The secretary, Mr. F. A. Southam, read the annual report of the committee, in which the members were congratulated on the continued prosperity of the Society. During the past year, it was stated, twenty-four new members had been elected, whilst seventeen had, through death and other causes, severed their connexion. The number of members now on the roll is 249.

ON the 10th inst. an Eye Hospital was formally opened at Cardiff by Mr. Alfred Thomas, M P.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on Jan. 17th:

Cranstoun, George, M.B. Durham, Ludlow, Salop.
Middleton, Alfred Hancock, M.D. Dublin, Shankill, co. Dublin.
Moxham, Marcus Camplin, L.S.A., Swansea.
Murray, John, M.B. Dublin, Norfolk-street.
Tattersall, C. Herman, L.R.C.P. Lond., Patricroft, Manchester.
Wild, Charles Henry, L.K.Q.C.P.I., Bedford-road, Bootle.

Admitted on the 18th inst.:—

Adams, Percy Targett, L.S.A., Ashford-road, Maidstone.
Browne, Henry, L.S.A., Cornwall-road, Westbourne-park.
Foxton, Edward, M.D. Kingston, Brockville, Ontario.
Green, Arthur, M.B. Durham, Walker-terrace, Gateshead.
Harrington, Samuel Henry Naseby, L.K.Q.C.P.I., Parliament-street, Liverpool.
Howitt, John FitzWilliam, M.B. Toronto, Guilford-street.
Johnson, John G., L.R.C.P. Lond., Campbell House, Aldershot.
McLearn, Isaac Crawford, M.D.Q.U.I., Highgate.
Sparrow, John Elliotson Pennington, L.S.A., Clarendon-road, Southsea.
Sumpter, Berners George, M.B. Durham, Cley-next-sea, Norfolk.
Thornton, Fred Whitfield, L.K.Q.C.P.I., Trinity-street, Huddersfield.
Yeoman, William Metcalfe, M.B. Durham, Northallerton.

Admitted on the 19th inst.:—

Blake, William Henry, L.S.A., Brondesbury Villas, Kilburn.
Brown, Henry Herbert, The Park, Harrow.
Crook, Herbert Evelyn, L.R.C.P. Lond., Northfleet, Kent.
Duncan, H., L.R.C.P. Lond., Henrietta-street, Covent-garden.
Spencer, George Herbert, L.K.Q.C.P.I., Turton, Bolton.
Williams, John T. Creswick, L.S.A., Dolgelly, North Wales.

COLLEGE LECTURES.—The annual course of lectures will be commenced on Monday, January 31st, at 4 o'clock, by Professor Francis Warner, M.D., who will deliver three lectures on the "Anatomy of Movement." Professor W. H. Hylson Jessop will deliver three lectures on the "Intraocular Muscles," commencing on Wednesday, February 16th. Professor C. Barrett Lockwood will deliver three lectures on the "Development and Transition of the Testicle, Normal and Abnormal," commencing on Wednesday, February 23rd. Professor A. Alfred Bowlby will deliver three lectures, commencing on Wednesday, March 2nd (subject will be duly announced). Professor Charles Stewart will deliver nine lectures on the "Auditory Organs of the Vertebrata," and on some recent Additions to the Museum, commencing on Wednesday, March 9th. The course will be concluded in June by Dr. Leonard C. Wooldridge, Professor Henry Power, and Professor Christopher Heath. The subjects of the several lectures will be hereafter published. The lectures will be delivered in the theatre of the College on Mondays, Wednesdays, and Fridays, at 4 o'clock punctually each day.

UNIVERSITY OF CAMBRIDGE.—At a congregation held on the 13th inst., the degree of M.B. was conferred on—

Walsham, Hugo, Caius.

COLLEGE OF PHYSICIANS IN IRELAND.—At the January examinations the following obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—Thomas Spread Campion, William H. Haslop, Hugh Griffith Hughes, Henry John Mathews, Frederick William Monsell, Denis Joseph O'Loghlin, Thomas Fox Parry, John Scleefield, Thomas Henry Wilson.

MIDWIFERY.—Thomas Spread Campion, Thomas Augustus Connellan, Timothy Corkery, Hugh Griffith Hughes, Wm. Edward MacFeeters, Henry John Mathews, Frederick William Monsell, Denis O'Loghlin, Thomas Fox Parry, Thomas Henry Wilson.

The following have been admitted Members of the College:

J. Armstrong Hanrahan. | William Frazer (Dublin).
William Frazer. | Guy P. L'E. Nugent.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The following have been admitted Fellows of the College:—

Alfred Asbury, A.M.D. | James McMullen, A.M.D.

SOCIETY OF APOTHECARIES.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise on the 13th inst.:—

Bacot, William Rickward, The College, Sudbury, Middlesex.
Ford, Theodore Albert Vores, Beaufort-road, Clifton, Bristol.
Johnson, Reginald Edward, Winter-street, Sheffield.
Wilde, Leonard, Ardwick House, Watford.

UNDERGROUND WIRES.—The Postmaster-General, in reply to a correspondent, states that the question of extending the system of laying telegraph wires underground shall receive his careful consideration.

MEDICAL MAGISTRATE.—Dr. Charles B. Plowright has been placed on the Commission of the Peace for the borough of King's Lynn.

A NEW monthly medical journal, entitled *Therapeutische Monatshefte*, edited by Drs. Langgaard and Rabow, is being published by O. Liebreich of Berlin.

THE Marquis of Bute has decided to present to the corporation of Cardiff a site for the proposed hospital for infectious diseases, which it is proposed to provide for that town.

AT the annual meeting of the governors of the Lincoln County Hospital on the 13th inst., it was reported that during the past year the expenditure of the hospital had exceeded its income by £101.

NAVAL MEDICAL SUPPLEMENTAL FUND.—At the quarterly meeting of the directors of the fund, held on the 11th instant, Sir W. R. E. Smart, K.C.B., M.D., Inspector-General, in the chair, the sum of £61 was distributed among the several applicants.

THE large number of applications for admission to the Normal School of Science and Royal School of Mines at South Kensington at the beginning of the present session has necessitated the adoption of a process of selection for the future.

SOCIETY OF PUBLIC ANALYSTS.—At the annual meeting of this Society held in the rooms of the Chemical Society, Burlington House, on the 12th inst., Mr. A. H. Allen, of Sheffield, analyst for the West Riding of Yorkshire, &c., and author of "Commercial Organic Analysis," was elected President of the Society for the ensuing year.

CARDIFF MEDICAL SOCIETY.—The following members have been elected office-bearers for the year 1887:—President: Mr. T. Garrett Horder. Committee: Dr. M. G. Evans, Dr. Herbert Vacher, Mr. J. L. Treharne, and Mr. P. Rhys Griffiths, M.B. Treasurer: Dr. C. E. Hardyman. Hon. Secretary: Dr. W. Campbell.

THE Countess of Dufferin has issued an appeal for subscriptions in aid of the funds of the National Association for supplying Female Medical Aid to the Women of India. The Jubilee year seems, as the Countess of Dufferin remarks, a fitting occasion to make a very special effort to help those Indian women in whose sufferings the Queen has shown so great and personal an interest.

EPIDEMICS OF MEASLES.—Up to the 17th inst., 130 cases of measles, 14 of which proved fatal, were reported by the medical officer to have occurred at Sebastopol, Monmouthshire. In accordance with a notice of the sanitary authority the schools have been closed for three weeks. At Ashford in Kent several deaths have occurred, and the disease is pronounced to be of a very bad type. All the schools in the town have been closed for a fortnight.

PRESENTATIONS.—On the 29th ult. the members of the recent class in connexion with the St. John Ambulance Association at Worsbro' Dale presented Mr. Blackburn of Barnsley, who had acted as their instructor, with a Tantalus spirit stand and a silver jug, in recognition of his services.—On the 13th inst. Mr. E. J. Foulston was presented with an illuminated address and a purse of gold, on the occasion of his departure for Earlestown.

LIVERPOOL MEDICAL INSTITUTION.—At the annual meeting held on Thursday, Jan. 13th, the following list of officers, council, and microscopical committee was adopted. President: J. B. Nevins, M.D. Vice-Presidents: William Alexander, F.R.C.S.; James Barr, M.D.; Robert Robertson, M.D.; W. Williams, M.D. Treasurer: F. J. Bailey, L.R.C.P. General Secretary: A. Bernard, M.B. Secretary of ordinary meetings: Damer Harrisson, M.R.C.S. Librarian: Richard Williams, M.R.C.S. Council: Alexander Davidson, M.D.; E. T. Davies, M.B.; C. G. Lee, M.R.C.S.; Robert Gee, M.D.; N. K. Marsh, M.R.C.S.; T. G. Wollaston, M.D.; J. D. Crawford, M.D.; Karl Grossmann, L.R.C.P. Edin.; W. Irvine, M.D.; W. P. Rowe, L.R.C.P. Edin.; G. E. Walker, F.R.C.S.; W. Whitford, M.D. Microscopical Committee: W. Alexander, F.R.C.S.; A. Barron, M.B.; P. M. Braidwood, M.D.; Henry Briggs, F.R.C.S.; G. Hamilton, M.R.C.S.; J. S. Hicks, L.R.C.P.; J. R. Logan, M.B.; Rushton Parker, F.R.C.S.; F. T. Paul, F.R.C.S.; W. Williams, M.D.; J. Wiglesworth, M.D. Auditors: William Fleetwood, M.K.Q.C.P.I.; T. G. Wollaston, M.D.

THE third annual ball for the benefit of the Italian Hospital in London was held on the 18th inst., and was largely attended.

MORTALITY OF MEDICAL MEN AT MATANZAS.—The Havana journal, *La Enciclopedia*, states that during the last three years no less than eight medical practitioners have died at Matanzas, which is a port in the northern part of the island of Cuba, the population of which is only about 35,000.

AYR COUNTY HOSPITAL.—The Committee of the County Hospital ball, which was held last week, have been able to hand over to the treasurer of the hospital the handsome sum of £408 17*s* 6*d*, whilst the funds of the charity have been still further enriched to the extent of £40 as the proceeds of the concert given in the Town Hall a few days since

MEASLES IN A LONDON WORKHOUSE INFIRMARY.—A serious epidemic of measles is prevalent in the Homerton district. At the meeting of the Hackney Board of Guardians on the 19th inst., twenty-four cases, four of them proving fatal, were reported to have occurred in the workhouse infirmary. A Board school in the district has been closed to check if possible the spread of the disease.

NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—At the monthly meeting of the members of this Association, on the 6th inst., a paper was read by Dr. Niven (Oldham) on the Infectiousness of Pneumonia. The author stated that the whole bearing of the inquiry into the question was that the new view that pneumonia was conveyed by germs might lead to the preparation of a vaccine having the power to protect anyone inoculated with it against a subsequent attack of the disease.

MORISON PRIZES FOR MERITORIOUS ATTENDANCE ON THE INSANE.—On the nomination of Dr. Alex. Keiller, LL.D., F.R.C.P.E., the Morison Lecturer on Insanity, the treasurer of the Royal College of Physicians, Edinburgh, has awarded the two annual prizes endowed by the late Sir Alex. Morison for meritorious attendance on the insane to Miss Agnes Shankland, of the Crichton Royal Institution, Dumfries, and Mr. Edward M'Mahon, head attendant, Saughton Hall, Murrayfield.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGE OF PHYSICIANS OF LONDON AND THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

FIRST EXAMINATION.

PART I.—CHEMISTRY, INCLUDING CHEMICAL PHYSICS.

Tuesday, January 4th, 1887, from 1 to 4 P.M. (Candidates must answer at least four questions, and not more than six.)

Section I.—1. Explain what is meant by the diffusion of gases. According to what law do gases diffuse? The relative densities of marsh gas and carbonic acid gas being 8 and 22, what are their respective diffusibilities? 2. What is understood by the term latent heat? A pound of ice at 0° C. is placed in a pound of boiling water, and the mean temperature of the water is found to be 10° C. What is the latent heat of water?

Section II.—3. Write a brief sketch of the properties of sulphur. How is sulphuretted hydrogen prepared, and what are its distinguishing chemical characters? Ten grammes of sulphuretted hydrogen are burnt in air. What products, and how much of each by weight, are formed? (S=32; O=16; H=1.) 4. What are the chief properties of iodine? How it it prepared from kelp? State carefully what occurs when iodide of potassium is added to solutions, respectively, of (*a*) mercuric chloride, (*b*) mercurous nitrate, (*c*) lead nitrate, (*d*) silver nitrate, and (*e*) chloride water. Give equations. 5. Describe the oxides, chlorides, and iodides of mercury, and give their formulæ. How are the oxides prepared, and how are they acted on by dilute hydrochloric acid?

Section III.—6. What is the composition of cyanogen, and what are its properties? How can the following bodies be obtained from potassium ferrocyanide: carbon monoxide, cyanide of potassium, prussic acid? 7. What are the relations between marsh gas (methane), chloroform, methylic alcohol, and formic acid? Describe how you would obtain marsh gas from acetate of sodium. Give equations. 8. Describe the constitution of the fats and oils. Some beef fat is boiled with a dilute solution of caustic potash: describe in detail what happens, and the properties of the bodies formed.

[*Note.*—This paper also applies to candidates for the licence of the Royal College of Physicians of London.]

PART II.—MATERIA MEDICA AND PHARMACY.

Wednesday, Jan. 5th, 1887, from 1 to 4 P.M. (Candidates must answer at least four questions.)

1. Give an account of nux vomica, stating its origin, its most important active principles, its medicinal action on the various organs of the body, its official preparations, and their doses. 2. Enumerate the various forms of alcohol contained in the Pharmacopœia. State the strength of each, and give a brief account of their medicinal action.

3. What are the official salts of (1) bismuth, (2) zinc? In what doses are they employed, and what are their actions? 4. Give an account of the medicinal action of hyoscyamus. To what drugs is it most closely allied, and to what is it antagonistic? What are its preparations, and what are their doses for internal administration? 5. Give the composition of the following Pharmacopœial preparations:—Mistura ferri composita, pulvis cretæ aromaticus cum opio, pulvis catechu compositus, letio hydrargyri flava, pulvis opii compositus, liquor arsenii et hydrargyri iodidi. 6. What forms of sulphur are mentioned in the Pharmacopœia? What are its preparations and doses and how is it eliminated?

[*Note.*—This paper also applies to candidates for the licence of the Royal College of Physicians of London.]

PART III.—ELEMENTARY PHYSIOLOGY.

Tuesday, January 4th, 1887. From 10 A.M. to 12 noon. (Candidates must answer at least four of the six questions.)

1. Name the tissues shown under microscopes A, B, C. By what characteristics do you recognise them? 2. Give the position and action of the valves of the heart. 3. Milk is a complete food for infants. Explain this statement. 4. Describe and explain a simple reflex act. 5. Enumerate the chief constituents of bile. 6. What changes does a striped muscle undergo in contraction and in death.

SECOND EXAMINATION.

PHYSIOLOGY.

Thursday, January 6th, 1887, from 2 to 5 P.M. (Candidates must answer at least four questions.)

1. Explain and illustrate toe action of the nervous system on the arteries. 2. Describe the minute structure of the spinal cord. 3. What is the structure of a capillary bloodvessel and a venule? Contrast the character of the blood-flow in these with that in an arteriole. 4. Describe the structure and functions of the skin. 5. Mention the fats which are usually taken as food. How are they digested? What is their probable destination? 6. State the composition and properties of glycogen? Where does it occur? How may it be prepared?

ANATOMY.

Friday, January 7th, 1887, from 2 to 5 P.M. (Candidates must answer at least four questions.)

1. Describe the sensory nerve-supply to the skin of the face and scalp. 2. Describe the dissection required to expose the deep epigastric artery. 3. Give the origin, course, insertion, actions, relations, and nerve-supply of the pyriformis muscle. 4. Describe the œsophagus, and give its situation, relations, arterial and nervous supply. 5. Enumerate the muscles acting on the shoulder-joint. Give their actions and nerve-supply. 6. Give the course, relations, and tributaries of the superficial and common femoral veins.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

BOUVERIE, F. P. MCDONALD, M.D., C.M., &c., has been appointed Medical Officer and Public Vaccinator for the North District of Wallasey of the Birkenhead Union.

BRIGGS, HENRY, M.B., F.R.C.S., has been appointed Honorary Medical Officer to the Hospital for Women, Shaw-street, Liverpool, vice Lupton, deceased.

BURKITT, JOHN C. S., M.D., L.Ch. Roy. Univ. Irel., has been appointed Medical Officer to the Whitwick Local Board.

CASTLE, HUTTON, M.B. Lond., M.R.C.S., has been appointed Medical Officer for the Shorwell North District of the Isle of Wight Union.

COURTIER, RAYMOND, M.B.Dur., M.R.C.S., late Senior House-Physician at the Westminster Hospital, has been appointed Assistant Medical Officer to the St. Marylebone Infirmary, Notting-hill, W.

DE JONG, EDWARD M., B.A., L.S.A., has been appointed Resident Junior Visiting Surgeon to the Ancoats Hospital, vice Alfred Mackay, M.B., C.M., resigned.

DRAKE, THOMAS, M.R.C.S., L.S.A., has been appointed Medical Officer of Health for the West Ham Urban Sanitary District.

GREENLEES, T. DUNCAN, M.B.Edin., Second Assistant Medical Officer to the Counties Asylum, Carlisle, has been appointed Assistant Medical Officer to the City of London Asylum, Stone, Dartford.

HOBBES, T. G. FOSBROKE RICE, L.F.P.S., L.M., L.S.A., has been appointed Medical Officer and Public Vaccinator to the Sutton District of the Aston Union, vice C. Barlow, M.R.C.S., L.S.A., deceased.

INGLEBY-MACKENZIE, K. W., M.R.C.S., L.R.C.P. Lond., has been appointed House-Surgeon to the Royal Isle of Wight Infirmary, Ryde, vice A. G. R. Foulerton, M.R.C.S., L.R.C.P., resigned.

JOLLIFFE, WALTER J., M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Shorwell South District of the Isle of Wight Union.

LIMRICK, W. SOMERVILLE, L.R.C.S., L.R.C.P.Ed., has been reappointed Medical Officer of Health by the Waterioo Local Board.

PARRY-JONES, W. R., L.R.C.S., L.R.C.P.Ed., L.S.A., has been appointed Medical Officer to the Rhoaddu Lodge, N. U. Order of Oddfellows, the Bridge House, Golden Lion, Bowling-green, and Wrexham and District Colliers Tontine Societies.

RYGATE, JOHN R., L.K.Q.C.P.I., L.R.C.S.Ed., has been appointed Medical Officer for the Seventh District of the Bridgwater Union.

WESTON, GEORGE H., M.R.C.S., L.S.A., has been appointed Medical Officer for the Polesworth District of the Atherstone Union.

WHITFORD, WILLIAM, M.D., Honorary Assistant Physician, has been appointed Physician to the Stanley Hospital, Liverpool, vice D. D. Costine, M.D., J.P., appointed Consulting Physician.

YOUNG, R. R., M.B., C.M.Glas., has been appointed to the Medical Staff of the Midland Railway Company, Leicester Centre.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

CARLISLE COUNTY ASYLUM.—Junior Medical Assistant. Age under twenty-six. Salary £80, with board; no wine or beer.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian-road, N. — Two Clinical Assistants.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Resident Clinical Assistants.

HOSPITAL FOR EPILEPSY AND PARALYSIS, Regent's-park. — Assistant Physician.

HULL AND SCULCOATES DISPENSARY.—House-Surgeon. Salary £150 per annum, with house (unfurnished), coals, and gas.

LANCASHIRE COUNTY ASYLUM, Rainhill, near Liverpool.—Assistant Medical Officer. Salary commences at £100 a year, with apartments and board.

NATIONAL ORTHOPÆDIC HOSPITAL FOR THE DEFORMED, Great Portland-street.—Surgical Registrar and Anæsthetist. An annual honorarium of £20 is attached to the office.

NORTH RIDING INFIRMARY, Middlesborough-on-Tees.—House-Surgeon. Salary £100 a year, with bed, board, washing, and £5 per annum in lieu of beer.

ROYAL BERKS HOSPITAL, Reading.—Assistant House-Surgeon. Qualification not essential. Board and lodging, but no salary.

SANITARY ASSURANCE ASSOCIATION.—Chief Medical Officer.

Births, Marriages, and Deaths.

BIRTHS.

HERMAN.—On the 19th inst., the wife of G. Ernest Herman, M.B., F.R.C.P., of Harley-street, Cavendish-square, W., of a son.

HUXLEY.—On the 17th inst., at Higher-terrace, Torquay, the wife of J. Usher Huxley, M.D., of a daughter.

JONES.—On the 13th inst., at Llanfyllin, Montgomeryshire, the wife of F. Felix Jones, M.R.C.S. &c., of a daughter.

MACQUEEN.—On the 16th inst., at Eastbourne, the wife of Thomas MacQueen, M.B., C.M., of a son.

MAURICE.—On the 15th inst., at Terrace House, Marlborough, the wife of J. Blake Maurice, M.D., F.R.C.S., of a son.

MARRIAGES.

GRIFFITHS — COLLING.—On the 15th inst., at St. Michael's, Great Torrington, Surgeon Gilbert Saunders Griffiths, 32nd Punjab Pioneers, to Katherine Celestina, second daughter of the late H. E. Colling, Esq., of Oakehampton, Devon.

HODGE—GEDYE.—On the 14th inst., at the Wesleyan Chapel, Cotham, Bristol, the Rev. Sydney Rupert Hodge, M.R.C.S., L.R.C.P., to Ann Elizabeth, eldest daughter of Francis W. Gedye, of Ashley Grange, Bristol.

LEEDS—EDWARDS.—On the 15th inst., at St. Andrew's, Holborn, Thos. Leeds, M.R.C.S., to Fannie, daughter of Joseph Edwards, of Burton-on-Trent.

REID—HORNE.—On the 5th inst., at the Parish Church, Kirkcudbright, William Swanston Spence Reid, M.B., C.M., to Agnes Darling, daughter of the late James Darling Horne.

RISK — LANGSTON-FADDY.—On the 13th ult., at St. Luke's Church, Jullandur, Punjab, Surgeon H. J. Erskine Risk, A.M. Staff, to Ellie Mary, youngest daughter of Major Langston-Faddy, Ret. List, Bengal Army.

STANWELL — SHARPE.—On the 12th inst., at St. Mary's, Rochdale, William Stanwell, M.R.C.S., to Mabel Frances, eldest daughter of the late Alex. Barclay Sharpe, M.D., F.R.C.S., of Norwood, Surrey.

WARNER—GROVE.—On Wednesday, the 19th inst., at St. Peter's, Eaton-square, by the Rev. R. E. Warner, M.A., cousin of the bridegroom, assisted by the Rev. A. Boyd, M.A., Frederick Ashton Warner, L.R.C.P., M.R.C.S., L.S.A.Lond., only surviving son of Frederick Warner, Barrister-at-law, of Woodford House, Trinidad, W.I., to Sydney Anne Grove, daughter of the late Christopher Grove, of Hertfordshire House, Bucks.

DEATHS.

ANGIER.—On the 16th inst., at his residence, The Highlands, College-road, Upper Norwood, James Hague Angier, M.R.C.S., L.S.A., in his 84th year.

ANDREW.—On the 10th inst., at his residence, St. John's Hill, Shrewsbury, Edwyn Andrew, M.D., aged 55.

HOLLIS.—On the 17th inst., at Deacons, Yarmouth, Isle of Wight, Charles Wise Hollis, M.D. Univ. Edin., in his 71st year.

NOTT.—On the 17th inst., at Russell-road, Kensington, Hamlin Nott, M.R.C.S., L.R.C.P.Ed., Surgeon-Major, Retired List, H.M.'s Indian Forces.

SNAPE.—On the 13th inst., at Chorley New-road, Bolton-le-Moors, Richard Forth Snape, F.R.C.S.Eng., aged 65.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births Marriages, and Deaths.*

Medical Diary for the ensuing Week.

Monday, January 24.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
SOCIETY OF ARTS.—8 P.M. Dr. J. L. W. Thudichum: The Diseases of Plants, with special regard to Agriculture and Forestry (Cantor Lecture).
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Clinical Evening. Mr. Davies-Colley: Case of Plastic Operation for Ectropium.—Mr. Walter Pye: Case of Plastic Operation on the Face.—Dr. Maguire: Analgesia after Injury to the Head.—Dr. Isambard Owen: Case of Tumour of Abdomen, and others.

Tuesday, January 25.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 1.30 P.M. Skin Department, Mondays and Thursdays, 9.30 A.M.
SOCIETY OF ARTS.—8 P.M. Mr. J. H. Kerry Nicholls: The Volcanic Eruption in New Zealand.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. Barwell: On Widely Incising by a Two-Stage Method Hydatids of the Liver.—Mr. W. E. Cant: Clinical Observations on "Induration" in the Primary Lesion of Syphilis in Women (communicated by Mr. Holmes).

Wednesday, January 26.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9 A.M.; Saturday, same hour.
HUNTERIAN SOCIETY.—8 P.M. Mr. Croft will explain and demonstrate the Method of Treating Fractures by the Immediate Application of Plaster-of-Paris.
SOCIETY OF ARTS.—8 P.M. Mr. J. Traill Taylor: Photographic Lenses.
BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown. Address on Listerism, by Dr. Granville Bantock. Council at 8 P.M.

Thursday, January 27.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Living and Card Specimens at 8 P.M.:—Mr. Nettleship: (1) Atrophy of Optic Nerves with Multiple Congenital Exostoses of Skull; (2) Three cases of Night Blindness with Peculiar Retinal Changes.—Mr. George Cowell: Three cases showing the result of Operation for Conical Cornea.—Mr. Marcus Gunn: Case of Transverse Calcareous Film of Cornea. Papers:—Mr. P. H. Mules: A short record of Some Unusual Clinical Cases.—Mr. G. A. Berry: On three cases of Acute Cerebral Disease with Ocular Symptoms.—Mr. W. H. Jessop: Sudden and Lasting Lateral Nystagmus.—Mr. W. Lang: Case of Meningitis after Excision.

Friday, January 28.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Address by the President. Mr. Henry Morris: (1) A case of Calculous Disease of both Kidneys, with Remarks on the Surgical Treatment of Calculous Kidneys; (2) A case of Nephro-lithotomy.—Mr. Howard Marsh: A case in which very Severe Symptoms were due to Four Small Stones in an Atrophied and Movable Kidney; Failure to Detect the Kidney by Lumbar Incision; Discovery by Laparotomy; Successful Removal of the Organ.—Mr. W. H. Bennett: A case of Supposed Nephrotomy for Scrofulous Disease. Living Specimens:—Mr. J. R. Lunn: (1) A Boy with Ichthyosis; (2) Peculiar Deformity of the Feet in an Ataxic Patient; (3) A Man with Raynaud's Disease of the Feet; (4) A case of Myxœdema with want of Development of the Genital Organs.

Saturday, January 29.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, January 20th, 1887.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Jan. 14	30·32	N.E.	33	32	...	37	31	...	Foggy
,, 15	30·30	E.	34	32	...	35	32	...	Cloudy
,, 16	30·10	N.E.	31	Froz	...	37	29	...	Overcast
,, 17	30·09	W.	27	Froz.	...	40	24	...	Overcast
,, 18	29·97	W.	40	39	...	49	33	·12	Raining
,, 19	30·10	W.	49	47	...	54	39	·02	Overcast
,, 20	30·39	N.	40	37	...	45	37	·15	Fine

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

THE RIDDELL FUND.

Amount already acknowledged	£54	1	0	C. J. Kieland, Esq. ...	£1	1	0
F. Le Gros Clark, Esq. ...	1	1	0	J. Gould, Esq.	1	1	0
W. E. C. Nourse, Esq. ...	1	1	0	W. Pearse, Esq.	1	1	0
Sympathy	0	5	0	Miss E. Lunn	1	0	0
Collected by Dr. Woodman, Exeter:—				W. Easton, Esq.	0	5	0
E. A. Brash, Esq.... ...	1	1	0	Mrs. Nicholson	0	5	0
				J. E. James, Esq.... ...	0	5	0
				Sympathy	0	2	6

Captain Petrie.—The disclosures made by our Analytical Sanitary Commission resulted, we are happy to say, in such legislative measures being adopted as have rendered impossible in this country gross adulterations of the kind specified in the extract from the Pittsburgh paper. The article, as a whole, is probably intended to be amusing, rather than descriptive of an actual condition of things.

A Subscriber will find the reply in our issue of the 8th inst., p. 109.

COCAINE IN WHOOPING-COUGH.

To the Editors of THE LANCET.

SIRS,—In a letter which appeared in THE LANCET of Feb. 27th, 1886, on the treatment of pertussis by local applications, I suggested that cocaine be tried with the view of lessening the severity of the paroxysms. In the Journal of the American Medical Association of October 9th, there appears an original article by Dr. A. V. P. Garnett of Washington, in which he states that in January of last year he determined to try the use of hydrochlorate of cocaine by inhalation and used a six per cent. solution of muriate of cocaine in chloroform, of which ten minims poured into a wineglass made warm by tepid water were placed under the patient's mouth. No difficulty was experienced after a few trials in getting the patient to inhale the vapour. This practice was repeated every four hours, and, whenever possible to do so, immediately preceding or at the outset of a paroxysm of coughing, in the latter instance using double the dose of the solution. He found that by this means many of the paroxysms were arrested entirely or materially cut short. In very young children Dr. Garnett has found it more convenient to pour ten or twelve drops on a handkerchief, instead of using an inhaler. Should further experience confirm these conclusions, we have in cocaine a remedy that will do much to rob this disease of its most distressing symptoms, besides greatly facilitating the application of germicides for its radical cure.

I am, Sirs, yours truly,

Bournemouth, Jan. 17th, 1887. A. WOODMAN DOWDING, M.D.

M.D. & F.R.C.S.E. and *O.P.Q.* have not enclosed their cards.

Mr. Gillibrand.—Next week.

SHOULD NORFOLK HOSPITAL BE FREE?

Mr. James C. Barnham, in a letter to the *Eastern Daily Press*, argues against the proposal of making admission to the hospital independent of letters of subscribers and dependent on the mere comparative fitness of cases as determined by medical officers and others. He thinks such a rule would tell hardly upon patients coming from a distance, who might find themselves refused, and that it would not conciliate the support of distant parishes.

A Young Practitioner.—The attention of the bodies whose qualifications the advertiser holds should be directed to the matter.

Señor Fontanal (Lerida).—We cannot exchange.

Mr. J. W. Mason's (Hull) letter arrived too late for publication this week.

PERSISTENT DIARRHŒA.

To the Editors of THE LANCET.

SIRS,—In reply to the request of "L.R.C.P." for information from your readers concerning the treatment of persistent diarrhœa, I beg to send you the following abstracts of two cases.

CASE 1.—A coachman, aged forty-two, consulted me in 1879 for persistent diarrhœa. He had been exposed to great hardships and privations during the Franco-German War, and had had intermittent fever. Whenever he took anything to drink it was sure to "run through him" immediately, and he had been obliged to give up his place because he found that he was unable to sit for any length of time on the box without being disturbed by his infirmity. On the theory that the trouble might be of malarial origin, I gave him quinine (all the more usual remedies having been tried by my predecessors), and this was the last I saw of him as a patient. A few months later, however, I met him in the street, and in reply to my inquiry as to his health, he informed me that he was perfectly well. I was just congratulating myself on the success of the treatment when he added that it was not due to any physic of mine, or, indeed, of any professional brother, but that one of his colleagues who had suffered in a similar way had cured himself by wearing a flannel binder round the body, and, following his friend's advice, he had found it equally efficacious.

CASE 2.—A lady of uncertain age, from Central America, gave me some particulars about a similar condition. I was attending her husband, and the ailment was mentioned as a chronic infirmity, for which she did not expect to find any relief. She was saturated with malaria, and had tried every kind of treatment, the only medicine in which she had retained any faith being hamamelis. I do not think I offered any advice; but in any case she would not have followed it. The following year she again visited Paris, and I was much struck with the change for the better in her appearance, and learnt that she was then quite well. After trying without effect a grape cure and a whey cure in Switzerland, she had been recommended to go to Wiesbaden, where she had by the use of the waters been restored to health, and witnessed a like success in the case of a fellow bather.

I presume that your correspondent has eliminated from his diagnosis the possibility of organic disease of the liver. Assuming, then, that there is only habitual hyperæmia of liver and intestine, associated with malarial poisoning, I would recommend him to abstain from fluids during meals and the period of digestion, and take, even if it has failed under other circumstances, small doses of arsenic.

I am, Sirs, yours faithfully,

Rue Marbeuf, Paris, Jan. 17th, 1887. OSCAR JENNINGS, M.D.

To the Editors of THE LANCET.

SIRS,—Your correspondent, "L.R.C.P.," seems to me to be suffering from the result of abnormal fermentative changes in the bowels, due probably to the original obstruction. In all ordinary diarrhœa cases I find carbolic acid with ammonia sufficient to check these changes and the resulting flatulence. When, however, an element of chronicity is introduced, the bacillary consequences have to be combated with germicidal remedies having a more remote action, and of these the biniodide of mercury is the one I depend upon. I would prescribe as follows:—℞. Spiritus ammon. aromat., ʒss.; sol. morph. hydrochlor. (P.B.), ʒi.; sol. acid. carbolic. (1 in 20), ʒvi.; ether. chloric., ʒii.; sol. hydrarg. bichlor. (B.P.), ʒi; potass. iodid., ʒss.; aquam ad ʒviii. M. ft. Mist. One tablespoonful every four hours.

I am, Sirs, your obedient servant,

Jan. 17th, 1887. C. R. ILLINGWORTH, M.D.

To the Editors of THE LANCET.

SIRS,—I have little doubt in my own mind that "L.R.C.P." is suffering from malarial poisoning, and I would suggest a trial of large doses of quinine. I have myself suffered from such diarrhœa on my return from the tropics, and at first could not account for it, and treated it wrongly with astringents; but experience has proved to me that, as far as my case went, its cause was tropical malaria lying latent in my system and breaking out periodically in troublesome diarrhœa, and at other times in excruciating muscular pains. As Sir J. Fayrer said in his lectures at the College of Physicians in 1882, its symptoms are multifarious. Among other peculiar pains it gives rise to is unendurable pain in the vicinity of the kidney and along the course of the ureter and into the testis. This in my case is always relieved by a large dose of quinine. I remember in my young and inexperienced days, in the hot weather in India, treating this latter expression of its existence in soldiers as acid urine passing down the ureter, and giving bicarbonate of potash and anodynes. Since I have become the subject of such symptoms I am forcibly reminded of my malpraxis, and in those cases a large dose of quinine would have given rapid, if not instant, relief.—I am, Sirs, yours faithfully,

Jan. 17th, 1887. A SURGEON.

To the Editors of THE LANCET.

SIRS,—Will anyone kindly give me some suggestions as to the treatment of the following case of obstinate diarrhœa?

Mrs. L——, after suckling her first child for two months, was attacked for the first time in her life with diarrhœa, which has continued, more or less, for the last five years. Milk, vegetables, fruit, or coffee always bring it on. Worry, anxiety, and excitement also have the same effect. The diarrhœa came on worse after the birth of the second child and the third, so that she had to give up suckling. She is rather weak, and not well nourished. Appetite good. A mixture of catechu, opium, and chloric ether seems to have given more relief than any other medicine. She is the wife of a medical man, and has undergone a variety of treatment without any permanent good effect.

I am, Sirs, your obedient servant,

Jan. 17th, 1887. NEMO.

Dr. W. H. Murray.—We fear the employer is not liable, unless our correspondent can prove that he was called in on the employer's authority.

Mr. Evershed (Arundel).—We shall be glad to receive the particulars.

R. S. W.—It is customary to waive all considerations of fee in such cases.

HOMŒOPATHY.

To the Editors of THE LANCET.

SIRS,—I have just received a pamphlet on "The Medical Treatment of our Time," which proves to be a prize essay on homœopathy addressed apparently more to the public than to the profession. In the appendix there is an urgent appeal to young practitioners to "visit the homœopathic hospital in Great Ormond-street, watch its treatment, examine into its cases, and test its results with an open and candid mind and a sincere desire to arrive at truth." Now, this is exactly what I did, or rather attempted to do, soon after I was qualified. I was treated with great courtesy by the medical officers, and allowed to accompany the physicians on their somewhat rapid rounds; but upon my repeated requests to be permitted to attend in the morning and assist in taking notes and examining the patients, I was told that that could not possibly be allowed. I was, I remember, shown a patient who was being cured of impetigo by taking a solution (!) of carbon, and was assured that some drug—I forget what—had caused several ovarian tumours to disappear. I was also taken to a meeting of the British Homœopathic Society, where I heard it gravely stated that natrium muriaticum (chloride of sodium) in minute doses was the best treatment for relapsing fever. I was also shown the book by which, as I was told, all homœopaths studied their treatment, referring to it as to a dictionary. This was "Jahr's Materia Medica." The absurdities I found in it when I looked at it in the British Museum convinced me that homœopaths must be satisfied with very little evidence, and has since made me sceptical when I am told of the wonderful cures they effect.

I am, Sirs, yours faithfully,

Jan. 18th, 1887. A BAFFLED INQUIRER.

*** We have also received a letter on this subject from Mr. A. G. Bateman, M.B., in which he says that Drs. Ringer and Brunton have done an immense deal to break down the barrier between homœopathy and allopathy, asks for a calmer and juster examination of both systems and, with a generosity which does him no discredit, argues for a discontinuance of what he calls "boycotting" the homœopath. The prize essay which calls forth these letters is prefaced by a communication from Dr. Richard Hughes, in which, in a somewhat menacing tone, he says, and he reiterates, that "this [the prize essay] may be the last appeal to the profession of this country for justice to homœopathy." We regret to say that the "last appeal to the profession" looks much more like an appeal to the public, or rather to the less informed among the public. The medicine of to-day, excepting homœopathy, is held up to ridicule and disparagement, and is in very material respects misrepresented whilst its real achievements are not stated. The whole idea underlying the prize essay is that there is a conspiracy in the minds of the men of medical science to shut their eyes to the discovery of Hahnemann. This is an admission of despair and almost of failure. Is there any other instance of all the scientific men in Europe resisting a true discovery for nearly a hundred years? The idea is altogether absurd. The sooner homœopaths see that they boycott themselves the better for them. All they have to do is to drop their distinctive appellation, cease to believe that there is something in the human mind specially inimical to them, liberate their own minds from the fetters of a fantastic notion which they are pleased to call a "law," and recognise the general drift of medical science and art, and they will find no unfriendly feeling to them.—ED. L.

Nisis.—Such a person is not likely to suffer prosecution. But he is not justified in acting in the way suggested.

Frater.—It is difficult to answer the question without knowing the nature and amount of the insurance for which the fee is paid.

Mr. E. J. Fisher.—The duty is by law made imperative and gratuitous.

CITY AND GUILDS OF LONDON INSTITUTE.

PROFESSOR ARMSTRONG'S lectures at this institution, on the Chemistry of the Alkaloids and Albuminoids, commence on Monday next, Jan. 24th, and not on the 27th, as by an error was stated in an advertisement in our columns.

M.D., F.R.C.S.—Our correspondent acted with much humanity and reasonableness. The journey home might have been followed with fatal consequences. He has the satisfaction of having done right—the praise of Boards of Guardians does not always follow that line of conduct. The existence of measles already in the infirmary nullifies the only conceivable argument against his action.

Constant Reader.—1. Moorfields or any of the principal general hospitals.—2. This is more a question of taste than of professional etiquette.—3. We cannot give an opinion without seeing the circular.—4. As we understand the question, the reply must be in the affirmative.

Honorarium.—Unless any circumstances exist of an exceptional nature, such as length of attendance, &c., the charges mentioned appear highly reasonable.

EMASCULATION OF FOWLS.

To the Editors of THE LANCET.

SIRS,—Your correspondent, "B. L. T.," will find all he wants relative to caponising and poulardising of fowls if he refers to the large edition of Tegetmeier's Poultry Book, p. 138 (published by Routledge).

As I am writing, I should like to take the opportunity of asking whether any of your readers have found any special treatment succeed in split or fissured lip. A little girl, aged ten, always suffers from this in cold weather, especially the lower lip, which gets rather a deep crack in the centre. Even if it slightly heals, laughing will make it bad again. I have tried several of the usual applications—oleates, salves, &c.

I am, Sirs, yours faithfully,
Jan. 19th, 1887. FIDELIS.

To the Editors of THE LANCET.

SIRS,—In reply to your correspondent, "B. L. T.," we beg to say we have been making sets of instruments for caponing chickens for upwards of eight years. Directions as to the mode of operation accompany each set.

We are, Sirs, yours obediently,
Jan. 18th, 1887. KROHNE AND SESEMANN.

Mr. Brown (Oban).—We have not given an exhaustive opinion on the nutritive value of the esculent. One of the Handbooks published by Clowes in connexion with the late Health Exhibition, entitled "Health in Diet," Part I., contains a chapter on the subject, which may possibly answer the purpose of our correspondent.

THE LICENCE OF THE LONDON COLLEGE OF PHYSICIANS A SURGICAL QUALIFICATION.

To the Editors of THE LANCET.

SIRS,—Can a L.R.C.P. Lond. call himself "Surgeon," having no other diploma? Or is a L.R.C.P. Lond. having only that diploma a surgeon? Can he give surgical evidence in court? Can he sue in a county court for surgical treatment?

I am, Sirs, yours truly,
January, 1887. L.R.C.P. LOND.

*** The answer to all the above questions is in the affirmative. The licence of the London College is a double qualification, complete in itself.—ED. L.

ERRATUM.—An obvious printer's error occurred in our issue of Dec. 25th, second paragraph, page 1245, where "Birmingham" is put for *Washington*.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Fenwick, London; Dr. Charteris, Glasgow; Dr. Quinlan, Dublin; Dr. Griffiths, London; Dr. Maclagan, London; Mr. Harwood, Bristol; Sir Philip Magnus, London; Rev. C. Bullock, Blackheath; Mr. Symonds, London; Mr. Fisher, Wolverhampton; Dr. Illingworth, Clayton; Mr. Shirley Deakin; Dr. Alderson, London; Mr. B. C. Beale, London; Dr. Percy Boulton, London; Mr. J. B. Pike, Loughboro'; Messrs. Fraser and Co., London; Dr. A. Cordes, Paris; Dr. Jacob, Leeds; Mr. Nelson Hardy, London; Dr. C. F. Knight, Dublin; Messrs. Deighton and Co., Cambridge; Mr. Evershed, Arundel; Dr. Murray, Galashiels; Dr. Whitelegge, Nottingham; Mr. Donnelly, London; Dr. Bedford Fenwick, London; Mr. A. Robinson, Rotherham; Messrs. Duncan and Co., Edinburgh; Dr. P. F. Frankland, London; Messrs. Woolley and Sons, Manchester; Captain Petrie; Messrs. Wood and Co., New York; Dr. J. Denys, Louvain; Dr. Ewart, Brighton; Messrs. Lee and Nightingale, Liverpool; Mr. F. A. Hind, London; Mr. Brady, Wigan; Mr. J. G. Horder, Cardiff; Mr. Maitland, London; Mr. J. W. Carr, London; Surgeon-Major Alcock, Dublin; Mr. A. G. Bateman, London; Dr. Simmons, Lincoln, U.S.A.; Dr. Cilla; Messrs. Wright and Co., Bristol; Mr. Clark, Margate; Dr. Tennant, Matlock; Mr. Clark, Edinburgh; Mr. Trevithick, London; Surgeon-Major Ellis, Alligarh; Dr. McNeal, Glasgow; Mrs. Hitch, St. Leonards-on-Sea; Mr. Mayne, Falkirk; Mr. Greenway, Middlesboro'; Mr. Scott Foster; Mr. Roger Williams, London; Mr. H. C. Burdett, London; Messrs. C. Griffin and Co., London; Mr. Dambrill-Davies, Chelford; Messrs. Krohne and Sesemann, London; Mr. J. M. Menzies, London; Dr. Dowding, Bournemouth; Mr. Blake, Dublin; Mr. Murison, Glasgow; Dr. R. W. Raudnitz, Prague; Mr. K. Taylor, Macclesfield; Messrs. Willing and Co., London; Mr. McKay, Preston; Mr. Berthier, Paris; Mr. Marcus Gunn, London; Mr. J. Croft, London; Mr. Cooke; Messrs. Smith and Son, Liverpool; Rev. J. P. Miners, Eastbourne; Mr. Evans, New Quay; Dr. T. G. Lyon, London; Mr. Barker, Hull; Mr. G. N. Pitt, London; Mr. Mason, Kingston-upon-Hull; Mr. Sell, London; Dr. T. Cooke, London; Mr. Clark, Edinburgh; Mr. Russell, Liverpool; Mr. Mitchell, London; Miss Eustace, Brompton; Mr. Ville, Birmingham; Mr. H. Allingham, London; Frater; Unqualified Assistant; A Surgeon; Nemo; J. B. H., Gosport; F. S. H., Bristol; A Young Practitioner; Honorarium; Fidelis.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Hollis; Mr. Thomson, Anstruther; Mr. Harbord; Mr. Colecliough, Merthyr Tydvil; Mr. Bryan, Hanwell; Mr. Greenish, London; Mr. Gayley, Tipperary; Mr. Read, Canterbury; Mr. Brooks, Hull; Mr. Torrance, Blofield; Mr. Royle, Sherborne; Mr. Essex, Pontypool; Mr. Smith, Westminster; Mr. Hartley, Cheltenham; Messrs. Atkinson and Co., Kendal; Dr. Stainthorpe, Redcar; Messrs. Bradshaw, Notts; Dr. Mackenzie, Edinburgh; Mr. Stephens, Austell; Messrs. Kuhner and Co., London; Messrs. A. and C. Black, Edinburgh; Messrs. Wilson and Son, Manchester; Mr. McArthur, Glasgow; Messrs. Maclachlan and Co., Edinburgh; Mr. Carless, Devizes; Mr. Aitken, Aberdeen; Mr. Lilley, Leicester; Mr. Gillibrand, Bolton; Mr. Mackay, Esko; Medicus, Sheffield; Alpha, Brighton; Alpha, Stamford; Sister; L. A. E.; Medicus, Liverpool; Medicus, Holloway; Barium; G. D., Edinburgh; Physician, Brighton; Medicus, Notts; X. Y.; Medical, Luton; W. E.; Yorkshire; Z. W.; Fides, Doncaster; Billhay, West Bromwich; Omega, Birmingham; Southport, Leicester; M.R.C.S., Manchester; Deutsch; X. Y., Manchester; Urgent; X. Y. Z.; M.D., Peckham; H. T. A.; M.D., Hackney; Ivor; G. S., Oldham.

Entertainment Gazette, The Stockkeeper, Bolton Journal, Jarrow Express, Boston Guardian, Herne Bay Press, Salisbury Times, Rock, Huddersfield Examiner, Eastbourne Review, Barnsley Independent, West Yorkshire Pioneer, Wigan Observer, Enniestown Guardian, &c., have been received

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